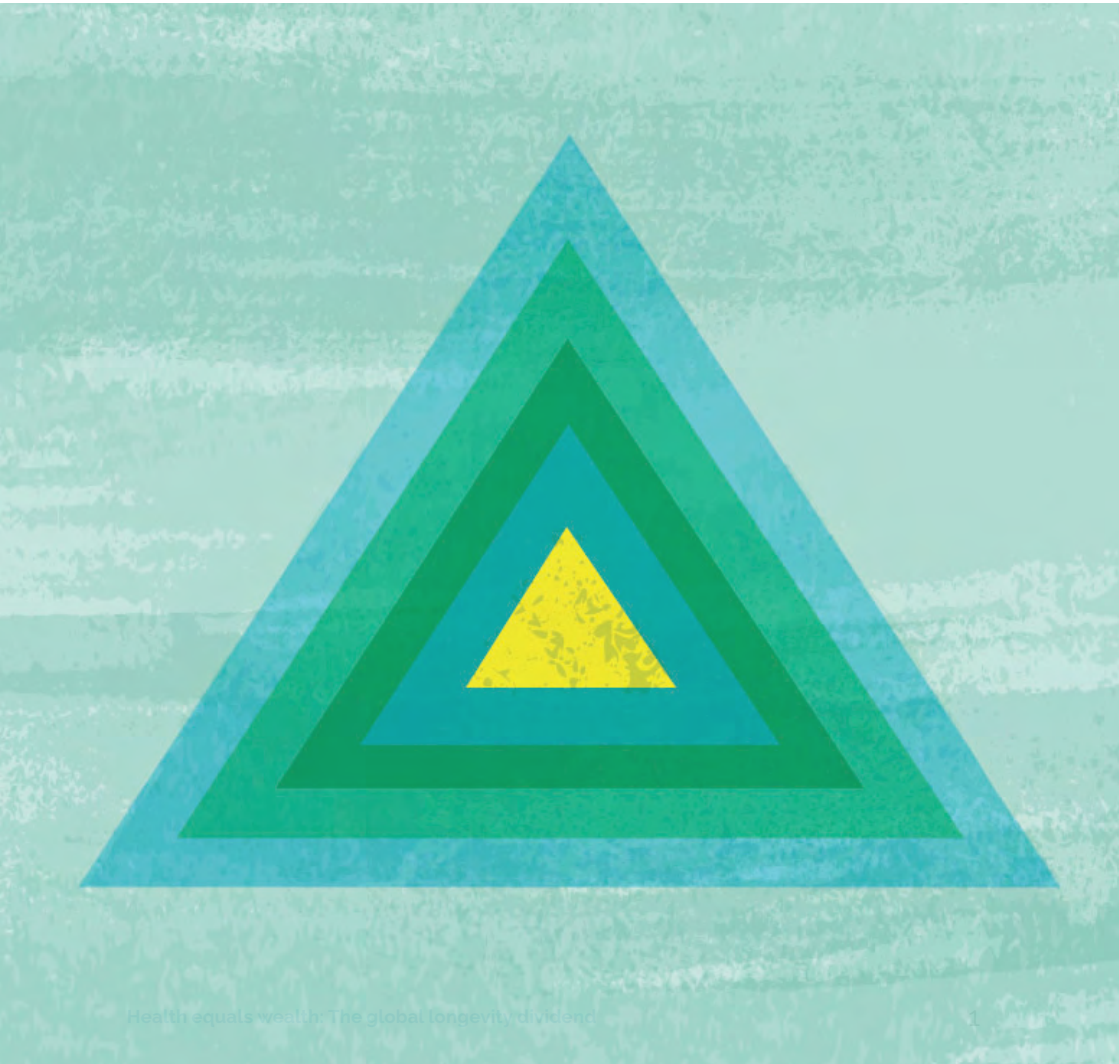
Health equals wealth

The global longevity dividend



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Summary

We've become accustomed to our ageing population being presented as a bad thing. Dangerous rhetoric painting older people as disposable has become far too common, particularly since the start of the COVID-19 pandemic. The impact of ageing is portrayed as being overwhelmingly negative for our economy and society. Worse, that impact is seen as predetermined, rather than something we can act to mitigate.

Currently, our policy response is mainly defensive. Policy makers are so fixated on the direct costs of ageing that they fail to notice the significant and growing contributions that older people make. This prevents them from fully realising the social and economic potential of older people - and from appreciating the potential longevity dividend.

We can't ignore the challenges for the public purse and the wider economy – but realising the opportunities of ageing can help address these. We can maximise the opportunities for older people to work, earn, and spend, and to volunteer and care for loved ones. Older people's social and economic impact is already significant, but there's potential to increase this further. This is because some of the barriers to contribution that they face are avoidable – with the most important being poor health.

This document builds on our UK report *Maximising the longevity dividend.*[1] We consider the social and economic impact of older people across the G20 economies[a], how this compares between those economies, and how it is changing over time. We also consider the opportunities to maximise this impact by improving health for older people; the most effective way to do this is by prioritising prevention.

[a]The G20 members are Argentina, Australia, Brazil, Canada, China, France, Germany, India, I ndonesia, Italy, Japan, the Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, United Kingdom, United States, and the European Union.

Older people's economic and social contributions

In most G20 economies, older people are increasingly working, earning, and supporting a growing share of the economy.

Across the G20:

- People are working for longer; employment rates for older people (aged 50 to 69) are expected to rise from 57% in 2017 to 65% in 2035 – this would be close to employment rates for younger adults.
- The workforce is ageing; people aged 50 and over already accounted for nearly 1 in 3 workers (29% of the workforce) in 2018 – up from 26% in 2004; this could be 37-40% by 2035.
- In 2014, workers aged 50 and older generated every third dollar earned. By 2035 this cohort is projected to generate nearly 40% of all earnings.
- From 2006 to 2014, across the EU, this cohort's earnings rose from 12% to 14% of GDP and from 27% to 33% of total earnings. If these trends continue, their earnings could account for nearly 50% of total earnings by 2035. Outside the EU, trends are more variable.

We are seeing huge growth in spending by older people, accounting for a growing share of the consumer market.

- Spending by older households (those led by people aged 50 and older) averaged 22% of GDP in 2015 across the G20; on aggregate this amounted to USD 9,669 billion[b] – more than the combined GDP of Japan, Australia, Canada and Brazil.
- Older households' spending is rising fast; it grew by 9% from 2010 to 2015, along with their market share, which rose from 54% to 56% over the same time period.
- This cohort's consumption is generally rising across the G20, but particularly in countries where employment rates for older people are rising most quickly.
- The consumer market is evolving to reflect the tastes and preferences of older people. Across the US, Canada and

[b]This figure represents spending by all older households in the G20 countries graphed in Figure 23 combined. Since 2015 data for Brazil wasn't available, 2010 data was used (converted to 2015 prices).

Australia, older consumers are generally shifting their spending towards housing & utilities, health, transport, recreation & culture, and household goods & services. These are already among the top sectors serving this cohort.

Unpaid contributions from older people are strengthening communities and helping to support the formal economy.

- Older people add significant value to their communities by undertaking unpaid contributions, such as volunteering, informal care-giving and looking after grandchildren.
- While people's market contributions fall significantly after the age of 65, in the G20 economies studied, they spend more time volunteering and caring for adult household members than the average across all other age groups.
- The economic value of older people's non-market contributions is substantial. The average unpaid contributions of older people across the EU and Turkey could be worth as much as 1.4% of GDP.

Health equals wealth

There are opportunities to unleash the social and economic potential of older people. We identified significant variation in rates of contribution and trends across countries, meaning that there are opportunities to learn from best practice. In particular, poor health limits older people's participation in both the market and non-market activities.

We examined how various measures of health relate to work, consumption and unpaid contributions in later life at both the individual and the country level. We also explored how government spending on health/preventative health is related to these economic and social activities across countries. We included national flu vaccination rates as an example of preventative health interventions.

Across 27 European countries, we found that older people in better health (i.e. those who have better cognition, are less limited in daily activities and/or who report being in good health) are more likely to **be in work, volunteer often,** and **spend more.**

We also found that health is an important factor in economic and social outcomes at the country level, across both European and OECD countries.[c]

We find **higher rates of employment among older people** in countries that spend more on health as a proportion of GDP and in which more older people (aged 65 and over):

- are not limited in daily activities.
- report good health.
- are vaccinated against the flu.

We find **older people spend more (on average)** in countries that spend more on health and preventative health as a proportion of GDP and where more older people (aged 65 and over):

- are not limited in daily activities.
- report good health.
- are vaccinated against the flu.

We find that **older people spend more time volunteering** in countries that spend more on health and preventative health as a proportion of GDP and where more older people (aged 65 and over) report good health. They also **spend more time informally helping (caring or looking after grandchildren) outside the household** in countries where more older people (aged 65 and over) are not limited in daily activities.

What can be done to maximise the longevity dividend?

Good health underpins the longevity dividend. To achieve better health, we must prioritise preventative health interventions, as these are the most cost-effective. Prevention not only reduces treatment costs but supports the wider economy.

Across countries, increasing preventative health spending by just 0.1 percentage points is associated with a 9% increase in annual spending by people aged 60 and over, and 10 more hours of volunteering for each person aged 65 or over. As our economies become increasingly reliant on such economic contributions, the case for investment becomes urgent.

[c]The results for employment rates across countries are based mainly on OECD data on OECD countries; the results for spending are mostly based on Eurostat data on European countries; the results for volunteering are mostly based on Eurostat data on European countries, as well as OECD data on a few non-European countries. See the separately published Appendix for more detail at https://ilcuk.org.uk/HealthEqualsWealth

But we also need to address other known barriers, such as non-inclusive products, services, town centres, workplaces and volunteering opportunities.

Contrary to the myth of baby boomers dominating public policy, we have not seen significant shifts in public policy in their favour. Preventative health budgets across the G20 are low, and are the first to be cut in times of crisis. Too often individuals lack the agency to make changes at the level that's needed; income and health inequalities still blight our communities; ageist practices and non-inclusive goods, services and communities hold older workers and consumers back. We need to take action at a societal level.

If we tackle the avoidable barriers preventing older people from contributing, the longevity dividend could be large. If the G20 economies studied enabled older people to work at the rates seen in Iceland, they could see an average GDP gain of around 7% – or an aggregate GDP boost of USD3.7 trillion.

G20 leaders have started to respond; in 2019 the G20 summit in Osaka prioritised ageing. The leaders made nine politically binding, future-oriented commitments on ageing populations. But these are just nine commitments, compared to the 2,526 made in total, and there is wide variation in the levels of attention to ageing in different G20 economies. Not enough national councils are developing strategies to prepare for ageing. And there is an urgent need to join up responses to ageing with other large-scale responses, such as to technological change.

The effects of the COVID-19 pandemic have strengthened the case for investing in health and prioritising prevention. The potential for health crises to cripple economies is tragically fresh in our minds. The pandemic has also made the link between the economy and our health unambiguous. It has demonstrated the danger of complacency about preventative health, and the health of older adults.

We have also seen that healthier populations, with fewer health conditions, have been more resilient to the pandemic, as with other infectious diseases.[2] Many countries have started to give preventative health interventions the funding they deserve.[3] As societies recover, we can aspire to do more than plaster over the cracks. We can build better, more pro-active health systems and

invest in ageing while fuelling immediate economic recovery and increasing our resilience.

Now is the time to redouble our efforts.

We propose an **Ageing Society New Deal**. We call for G20 economies to commit to developing country-level strategies for ageing that include specific commitments to:

1. Invest in health and recognise its economic value

I. Increase spending on preventing poor health at all ages:

- **Spend at least 6% of health budgets on prevention** (while Canada has already achieved this, most countries are far from this target). Once this has been accomplished, adopt more ambitious targets, such as the 15% target called for by the UK All Party Parliamentary Group (APPG) on longevity.[4]
- Ensure that **spending on preventative health keeps pace with the growth in preventable ill-health** projected as society ages**, as a minimum.**[5]

II. Tackle health inequalities:

- **Tailor health interventions to meet the needs of disadvantaged groups** and **prioritise health spending on disadvantaged populations of all ages.**

III. Factor in health and inclusion when measuring economic growth:

- Move towards **complementing GDP with a measure that factors in health and inclusion** (such as the Inclusive Development Index).[d]

[d] A measure of growth that includes measures healthy life expectancy and inequality.

2. Support work in an ageing and changing world

IV. Incentivise employers and technology providers to redesign working life:

- **Incentivise technology innovation that supports productivity, rather than displacing workers – including older workers who are most at risk.**
- **Incentivise employers to reduce barriers to employment for older people**.

V. Support and empower all generations to have fulfilling and longer working lives:

- **Remove regulatory barriers** (such as mandatory retirement ages), **and incentivise and support people to work for longer** in flexible roles.

VI. Invest in lifelong learning:

- **Invest in opportunities for lifelong learning, and incentivise adoption** by encouraging people to move towards a 'multi-stage life.'

3. Unlock opportunities to tap into older people's growing power as consumers

VII. Support the health and care economy, in recognition of its economic value:

- **Invest in and develop health and care services,** and support innovation across these sectors.
- **Ensure formal care provision** develops to meet increasing need.

VIII. Support businesses servicing older people:

- **Develop strategies to support businesses to capture an ageing consumer market**, including support for innovators across sectors and existing businesses that wish to adapt.
- Encourage businesses to recognise opportunities **across the income spectrum.**

IX. Reduce barriers to spending in local communities:

- **Allocate funding to local governments to support inclusion within communities,** for example through action to make transport and public spaces accessible and inclusive.

4. Recognise and support unpaid contributions

X. Recognise and measure unpaid contributions:

- **Regularly measure unpaid contributions, and calculate their social and economic benefits**.
- **Take into account the impact of health on unpaid contributions** when making decisions about investing in health (such as cost-benefit analysis models).

XI. Support informal carers and involved grandparents:

- **Develop strategies to support older carers and grandparents.**

XII. Enable and incentivise volunteering at all ages:

- **Develop strategies to support and incentivise volunteering, including removing barriers to participation** particularly for disadvantaged groups.

While we urgently need an Ageing Society New Deal, it won't work if there are older people living in poverty. Ensuring that retirees have adequate incomes for today and tomorrow is essential to realise the longevity dividend. This will require action by both state and private actors. We know that poverty harms health[6] and undermines people's market and non-market contributions. We also know that at present the poorest save a disproportionate share of their income.[7] We must ensure that people feel financially secure in later life to realise the benefits of longevity.

The COVID-19 pandemic has created an exceptional opportunity for society to prioritise health and act to support older people. Amidst the devastation it has caused, it has shown us how our economies are linked to health, and exposed the dangers of under-investing in prevention. Let's use this shift in mind-set to commit the funds today that we'll need to realise a longevity dividend tomorrow.

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Introduction

Populations are ageing, across G20 members and around the world; this is transforming society and the global economy.

Populations are ageing rapidly because of rising life expectancy and declining birth rates (although rates vary by country). In most G20 members the ratio of people aged over 65 to people aged 15 to 64, will at least double by 2060, and the proportion of people around the world aged over 80 will triple.[8]

This will fundamentally reshape our economies and societies: a fact recognised last year by G20 leaders. In a historic first, health and finance ministers discussed the issue at the 2019 summit in Osaka, to start planning for the risks and opportunities this will create.[9]

The ageing of our society is often portrayed as a disaster for our economy. But this narrative neglects the potential benefits.

The prevailing debate around ageing has been overwhelmingly negative. Demographic change has implications for our economies that all G20 members must take seriously; the Economist Intelligence Unit recently found that no G20 member is adequately prepared for an ageing population.[10] The key challenges will be:

- Countries with older populations generally have higher healthcare costs. The OECD found that if current trends continue, health expenditure across 15 G20 economies will increase from 8.7% of GDP in 2015 to 10.3% by 2030.[11]
- As more people live longer after retirement the demand for state pension payments will increase.[12]
- The proportion of the population that is of working age is falling; this may combine with declining birth rates to produce labour shortages.[13]
- The proportion of the population that are net tax contributors is falling, while the proportion that requires support from the public sector is rising.
- Some countries, including Japan and Italy, are facing population decline, which compounds these challenges. Russia, Germany and China are expected to join them by 2030, and South Korea and Brazil by 2050.[14]

However, we may well overstate the economic challenges of ageing if we overlook older people's contributions, particularly those outside formal employment.[15] Worse, this may encourage a fatalistic view of ageing, where we feel powerless to affect its societal and economic impact.

In addition, our failure to recognise older people's contributions has led to a narrative in which they are portrayed as a burden. We have seen this clearly during the pandemic, with a growth in dangerous rhetoric portraying older people as disposable, and phrases like 'the boomer remover' underscoring the worst kind of age discrimination.[16]

As we illustrate throughout this report, older people's market and non-market contributions and spending are already significant, although their full economic potential hasn't yet been realised. There are enormous opportunities if we can help older people live healthy lives for longer, lengthening their productive lives and compressing the period of morbidity.[17]

In this report we explore three opportunities to realise this potential:[18]

- Channelling their extensive skills and experience into longer working lives.
- Channelling their knowledge and skills into productive non-market activities, such as volunteering, informal caring for adults and looking after grandchildren.
- Helping businesses to tap into this growing market by developing new products and services, or adapting existing ones, to meet the needs and aspirations of people in later life.

Maximising the opportunities of ageing will bring a longevity dividend that will help address the challenges of an ageing population.

Increasing the opportunities for older people to work and earn income would:

- **Boost overall GDP** directly and indirectly[19] via increased consumer spending.[e] This would in turn boost employment opportunities for all ages.[20]

[e]There may also be benefits from investment of savings, but these are not explored in detail in this report.

- **Boost government finances** by increasing income tax revenues and reducing spending on state pension payments.

Increasing the opportunities for older people to contribute via productive non-market activities may:

- **Reduce government costs** by supporting public services. For example, informal carers reduce pressure on formal care services, and volunteering activities often offset gaps in underfunded public services.[21] Grandparenting is also associated with better mental health[22] and reduced impoverishment for grandchildren.[23]
- **Benefit the formal economy**: for instance, grandparenting may allow young parents to remain in the workforce. [24]

Increasing opportunities for businesses to reach older consumers[f] and for older people to spend money would:

- **Help businesses create jobs, support growth and gain a competitive advantage** in a growing international market.[25]
- Help **support private consumption (and its share of GDP)**, which accounts for around 60% of GDP in most advanced economies, supporting a significant share of jobs, and boosting government revenues via VAT. (The net effect on GDP will depend on each country's dependence on consumption compared to savings and investments.)[26,g]

In addition, each of the measures above would be beneficial for the living standards, health and wellbeing of older people:

- Longer working lives give individuals a greater opportunity to accumulate wealth, which could boost their living standards during retirement.[27]
- Taking part in fulfilling work after retirement age can delay death, reduce the risk of serious health problems, boost wellbeing and provide a sense of purpose.[28] (Although poor quality work can have the opposite effect).[29]

[f]Although we focus on private consumption in this report, businesses may also wish to assist age-related public spending in becoming more efficient. See http://ec.europa.eu/research/innovation-union/pdf/active-healthy-ageing/silvereco.pdf.
[g]Other factors include spending and saving profiles over the life course, which vary across countries, and whether older people generally save in low-interest bank accounts or risky assets.

- Access to inclusive goods and services supports healthy ageing, reduces isolation and loneliness, and supports independent living.[30]
- Volunteering, grandparenting and (non-intense) informal caring for adults can improve mental and physical health.[31] (Although intense grandparenting or informal care-giving can negatively affect health and wellbeing.)[32]

These benefits will only be realised if we ensure that work is fulfilling for older people. Forcing people to work for longer in poor quality jobs out of financial necessity is likely to adversely affect health outcomes, wellbeing and productivity.[33] We must focus on enabling people to work for longer in fulfilling roles, rather than simply on extending working lives. A 'multi-stage' life, where people can take breaks from work to learn or care for family, may be needed to achieve this.[34] Similarly we must ensure that people are not burdened by excessive requirements to care, but are able to make choices about their care-giving.

We have agency over these opportunities – they're not set in stone.

"While daunting, this new set of challenges is not insurmountable. Demographic trajectories are not set in stone, nor are their implications for social, health and economic outcomes".[35]
Professor David Bloom

It is too often forgotten that the economic challenges of ageing can be offset by technological and institutional innovations, as well as adapting behaviour and policy.[36] Doomsday fiscal projections assume a world of static policy and institutions, with no improvements in morbidity or labour market outcomes, and where we are unable to adapt or innovate.[37] Just as our collective decisions influence the societal impact of rapid technological innovation, we can shape how ageing affects our economy and how these forces interact.[38]

The old-age dependency ratio has increased for over 100 years while the UK economy, for example, has continued to prosper.[39] So far, rapidly ageing populations have not significantly burdened national economies.[40] However ageing economies will face significant challenges if we do nothing;[41] for instance, tax revenues would have to increase by between 4.5 % and 11.5% of GDP by 2060 to keep debt at current levels.[42]

If we want to continue to prosper as societies age, we must ensure that the average 65-year-old of the future has a greater economic impact than that of today's average 65-year-old. How much we increase this impact will affect how competitive G20 economies will be in the long term.

We need a more rounded understanding of older people's economic impact.

In this report, we consider older people's direct impact on the GDPs of G20 members, covering:

- All spending on products and services by people aged 50 and over.
- Earned income of people aged 50 and over.
- Unpaid contributions of people aged 50 and over (including specifically those of people aged 65 and over, given the increased time spent on these activities).

We call these three factors the 'longevity economy'. We estimate the state of the longevity economy today, examine how trends are evolving over time and consider how they compare across G20 members. Examining trends across countries allows us to:

- Identify differences and consider opportunities for learning.
- Correct misunderstandings of the economic challenge posed by population ageing.[43]
- Better identify the opportunities of ageing.

Unpaid contributions should not be ignored.

Countries increasingly recognise the importance of understanding the economic value of productive non-market contributions.[44]

1. These contributions significantly affect country-wide wellbeing levels.[45]
2. These contributions negate the need for some paid labour by either governments or individuals and may increase overall consumption of goods and services, thus representing implicit income.[46]
3. These contributions can also affect the formal economy as well as government revenues, as they are associated with improved health outcomes and reduced strain on formal care services.

However, at present these contributions are not captured by GDP, leading some commentators to call for a more rounded measure that better captures all the contributions that impact wellbeing.[47]

It is important to recognise that there are trade-offs between market and non-market labour. Policy makers need to balance these trade-offs to incentivise people to allocate their time in later life optimally.

In this report we calculate the economic value of older people's non-market contributions, based on the value of the number of hours spent as if they were paid at an average value. Due to the wage assumptions we've made, we probably underestimate the true social and economic value of these contributions.[48]

We need to understand how to optimise these opportunities.

The final section of this report considers how health outcomes and investment affect the longevity dividend.

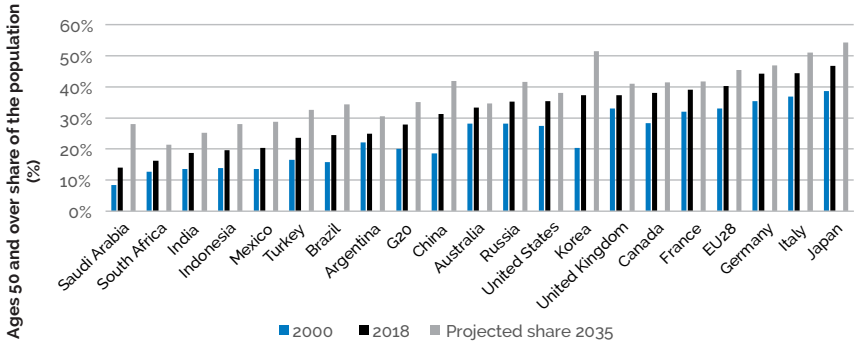
The COVID-19 pandemic has made the link between the economy and our health unambiguous. It has demonstrated the danger of complacency about preventative health, and the health of older adults. Countries with higher rates of chronic ill-health have faced higher COVID mortality rates and additional pressures on health systems.[49] There has been a shift toward preventative health and a rapid adoption of health tech to support this,[50] to keep older people out of hospital. Policy makers could ensure these short-term changes result in a longer-term shift to prevention to support an ageing population.

However, there will also need to be action around work in later life, as policy makers focus on supporting supporting their economies to recover. It will be vital to ensure that people of all ages can get back to work. The challenges of ageing populations are not going away – but nor are the opportunities. Bold nations must now take action to capitalise.

Population trends

Populations are ageing across the G20 – and this trend is due to accelerate in the future. But the rate of ageing varies considerably across economies.

Figure 1: Estimated and projected share of the population aged 50 and over (2000 to 2035)



On average, people aged 50 and over now account for around 28% of the G20 population – up from 20% in 2000. This is projected to rise to around 35% by 2035 (Figure 1).

Countries that have a younger population right now will age at a faster rate.

Advanced economies tend to have older populations now. While in Japan and Italy, people aged 50 and over already account for nearly 50% of the population, in Saudi Arabia, South Africa, India and Indonesia this is at, or under, 20%, and in Mexico, Turkey, Brazil, Argentina and China this is under, or around, 30%. But the share of older adults in countries with relatively young populations is expected to rise quickly up to 2035. These countries are expected to age faster than nearly all other G20 members except South Korea, and to age at a faster pace in future relative to previous years.

Employment and income

Employment patterns among older people

What's happening?

Employment falls as people get older.

Across every country, labour market participation rates and employment rates fall as people get older, especially as they approach the (country-specific) age of pension eligibility. In 2015, there was an almost 40 percentage point gap worldwide in the labour force participation rates for people aged 55 to 64 compared to those aged 65 and over.[51]

Older people are less likely to find work after losing their job, becoming disaffected and leaving the labour market for good.

- Internationally, older people are the least likely of all age groups to return to the labour market after losing their jobs.[52] As workers get older, the time spent unemployed lengthens and the chances of finding a job decline.[53]
- Once in long-term unemployment, older people are more likely to become disaffected and leave the labour market for good: a significant share of workers aged 65 and over are discouraged from seeking work.[54]
- This means that, although unemployment rates at older ages are relatively low, they do not include the relatively high number of older adults who are discouraged workers, who are not actively seeking employment, but would prefer to work.[55]
- Even when they have a job, older workers are more likely than other workers to work fewer hours than desired across countries.[56]

Why is this happening?

Health is one of the key reasons that older people leave the labour market involuntarily.

Barriers to the continuous employment or re-employment of older workers include workplace inflexibility (e.g. not permitting flexible work hours), age discrimination and a lack of training opportunities. However, health appears to be one of the most important factors:

- Across a number of countries, older adults with better health (according to both self-reported and objective measures of

health), as well as those with fewer limitations in daily activities, are less likely to be unemployed or retire early.[57].

- A growing number of studies have identified a causal relationship for older people between experiencing a health shock and stopping work, as well as between poor health and not working in later life.[58]
- Several studies find that health is the most important contributor to involuntary labour market exit at older ages.[59]
- Older men with less education, whose jobs tend to be more physically demanding, or who have poor working conditions, are the most likely to leave the labour market due to poor health.[60]

Non-economic factors may be more important than financial incentives in encouraging people to work after normal retirement ages.

- Stronger financial incentives, such as higher retirement ages or less generous pension benefits, are closely correlated with both higher employment rates and later exit from the labour market. In recent years, many OECD countries have undertaken such reforms to financially incentivise work at older ages.[61] However, without addressing the drivers of involuntary labour market exit, further increases in the pension eligibility ages may just increase poverty.[62]
- Non-economic motives may be more important for the decision to work post-retirement than financial incentives.[63]
- People who work post-retirement are more likely to be well educated and in good health[64] (although routine and manual workers in good health, who have greater financial need, are also highly likely to work past age of pension eligibility).[65]
- Higher educational levels not only increase the likelihood of return to work, but also might increase task complexity, work autonomy, the intrinsic value of work and work conditions; factors which motivate people to work for longer.[66]

Our analysis: Variation in employment rates by country

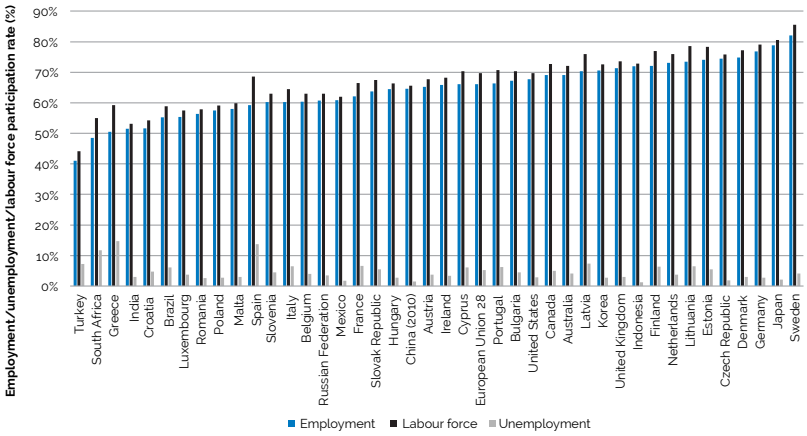
Employment rates at older ages vary significantly across G20 members – especially for people aged 65 to 69.

While we see a general pattern of lower employment rates in later life, this masks significant variation in employment and participation rates in the labour market for older people across the G20 and within the EU

(Figures 2 and 3). For people aged 65 to 69, this differs by over 40 percentage points.

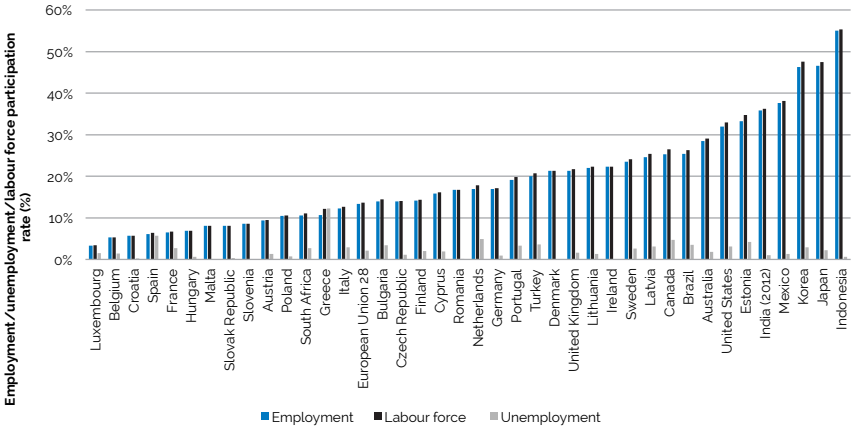
Wealthier economies within the G20, particularly European countries, have relatively high employment rates for people aged 50 to 64 (Figure 2).

Figure 2: Employment/unemployment/labour force participation rates for people aged 50 to 64 (2018)



For those aged 65 to 69, the picture is more mixed (Figure 3).

Figure 3: Employment/unemployment/labour force participation rates for people aged 65 to 69 (2018)



We are seeing rapid increases in people working in later life across most G20 members.

Since 2001, people aged 50 to 64, and 65 to 69, are increasingly either working or actively looking for work across most G20 members (Figures 4 and 5).

Figure 4: Changes in employment/unemployment/labour market participation rates for people aged 50 to 64 in G20 economies (2001 to 2018)

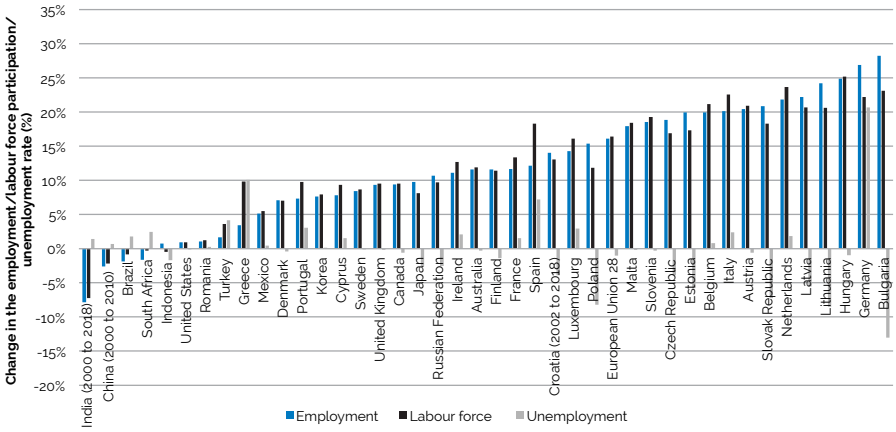
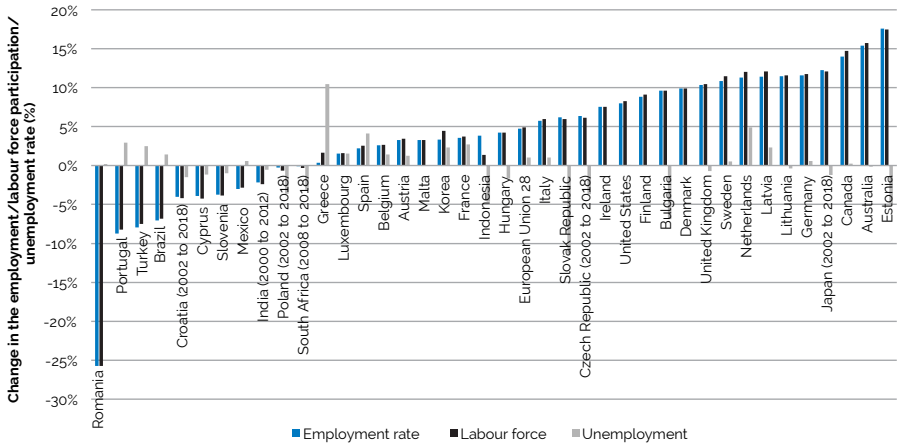


Figure 5: Changes in employment/unemployment/labour market participation rates for peoples aged 65 to 69 in G20 members (2001 to 2018)

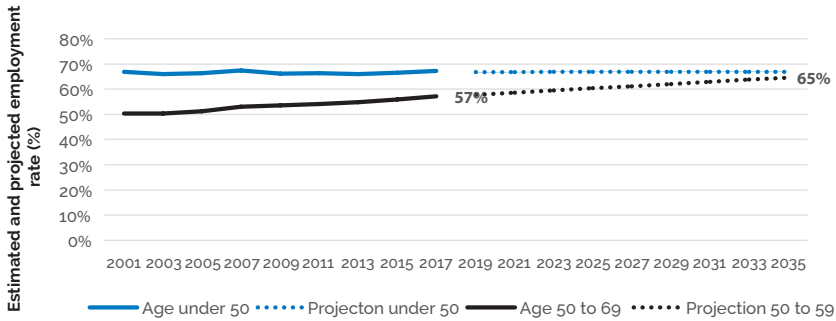


These trends constitute a sharp reversal from the early 1970s to the late 1990s, which generally saw falling employment rates as people grew older in most OECD countries.[67] The new trend is more pronounced in more advanced economies, such as European countries, Canada and Australia, while employment and labour force participation rates for older people have fallen in India, China, Indonesia, Turkey and Brazil over the same period.

By 2035, employment rates for older people will have nearly caught up with those of younger adults.

Employment rates for older people are increasing at a faster rate than for younger people, meaning they're catching up with their younger counterparts (Figure 6). Projections based on past trends reveal that employment rates for those aged 50 to 69 should catch up with adults aged under 50 by 2035; over 6 in 10 (65%) of all those aged 50 to 69 are expected to be in work by then. However, given the pandemic's effect on the global economy, it may be unrealistic to expect past trends to continue – at least in the short-term.

Figure 6: Estimated and projected employment rate, by age, in G20 members (2001 to 2035)



NB: This figure only includes economies for which the relevant data was available: EU28, Turkey, Japan, Korea, Brazil, Mexico, Canada, Australia, France, Germany, Italy, UK, US and Indonesia.

Why is this happening?

The variation in employment rates for older people suggests that country-specific measures significantly affect employment outcomes as people get older.

The relatively high rates of employment among people aged 50-64 in the EU may be because some of the key barriers to working, such as poor health, tend to be less prevalent.[68] Across the EU the most

common reason for people to leave the labour market before the age of pension eligibilty is involuntary exit.[69]

However, EU countries have particularly low employment rates at ages 65 and over compared to the average. Pension replacement rates (which measure how pension incomes compare to earned incomes) are generally more generous in these countries, particularly in Luxembourg, Belgium and Spain, compared to countries with higher employment rates like Japan, Korea and Mexico.[70]

However, it is not as simple as saying that higher pensions lead to less working – pension replacement rates are not especially generous in Croatia, which has lower rates of work, while rates are generous in India and Indonesia, where rates of work are higher.[71] It may be that in some countries older people face increasing financial pressures, or that they want to use their extra years, which they generally spend in better health, to stay active and feel fulfilled.[72]

Relatively rich economies tend to have older populations; in these countries pension benefits are becoming less generous as measures are taken to address their financial sustainability.[73] This may increase the financial pressures to work. Many of these countries, such as Germany,[74] have also made concerted efforts to support older workers and address barriers to employment in recent years.[75]

Many of the countries where employment rates are falling for people aged 65 to 69 – such as Indonesia, India, Mexico and Brazil – had relatively high employment rates to begin with.

Our analysis: Older people's significance for the workforce

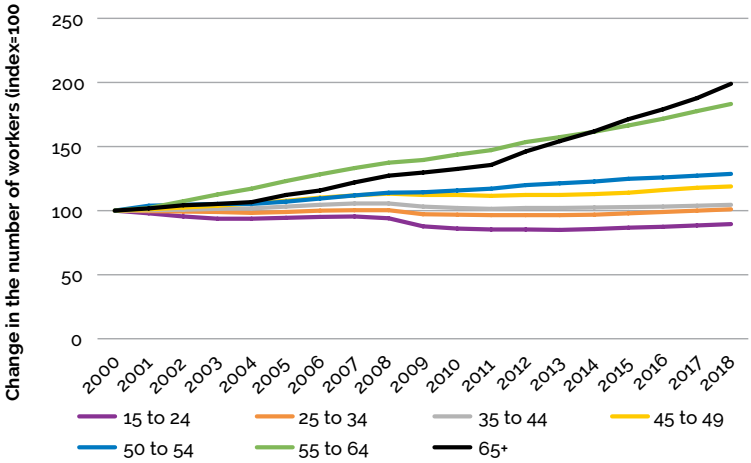
Older people make up an increasing proportion of the workforce across G20 members.

Trends in the employment rate, combined with our ageing populations, make older workers increasingly crucial to the workforce in G20 members. The number of older workers, especially aged 55 and over, has increased at a faster rate than for younger workers, both proportionately (Figure 7) and in absolute terms, since 2004/2005.

There has also been a marked increase in the number of workers aged 65 and over since 2010. As this period marked the recovery

after the 2008 recession, it seems that older workers played a crucial part across the G20. This signifies a change from previous recessions, where older workers tended to withdraw from the labour market in large numbers.[76]

Figure 7: Change in the number of workers, by age, in G20 members (2000 to 2018)

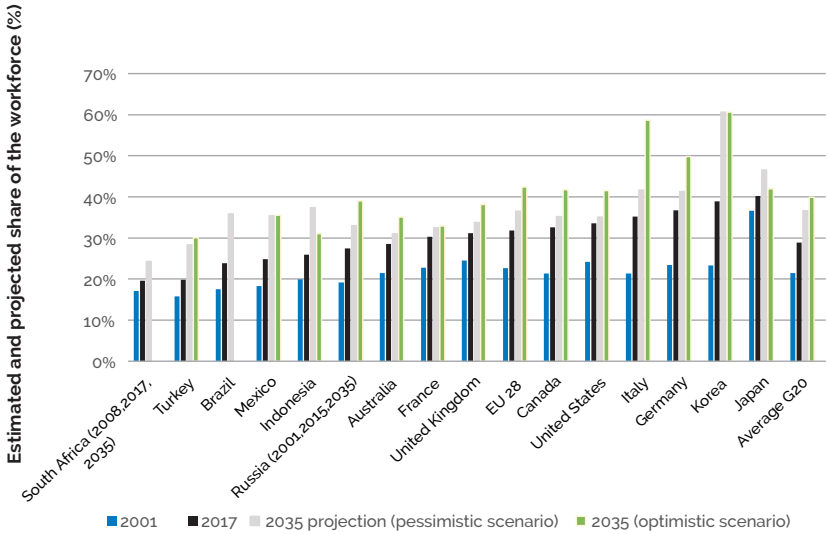


NB: This figure only includes economies for which the relevant data was available: EU28, Turkey, Japan, Korea, Brazil, Mexico, Canada, Australia, France, Germany, Italy, UK and the US.

This means that workers aged 50 and over account for a growing share of the workforce in all G20 members (Figure 8), while already representing close to 1 in 3 workers.

Older people will be increasingly important to labour markets across the G20.

Figure 8: Estimated and projected share of the workforce in G20 members for people aged 50 and over (2001 to 2035)



We have drawn up two scenarios to take a range of variables into account.

The pessimistic scenario: This relies on population projections alone and assumes that past trends don't continue. This notably assumes that the economic effects of the pandemic stall the improvements in employment rates for older workers in recent years.

The optimistic scenario: In this scenario, we assume past trends in the proportion of older people employed persist in future years.

The reality is likely to lie somewhere in between.

Noticeably, workers aged 50 and over are expected to account for close to 4 in 10 workers on average across the G20 in both scenarios by 2035.

The workforce is changing especially rapidly in Italy and Korea, where around 6 out of 10 workers are expected to be aged 50 and over by 2035 in the optimistic scenario in Italy and in both scenarios in Korea - up from under 4 out of 10 currently. The proportion of

older workers is also expected to grow quickly in Indonesia and Brazil based on demographic change alone.

National workforces will become increasingly reliant on older people, many of whom will have just reached their productivity peak.[77] Countries that figure out how to fully realise the potential of older workers will surely reap the rewards.

Our analysis: How older people's employment contributes to GDP

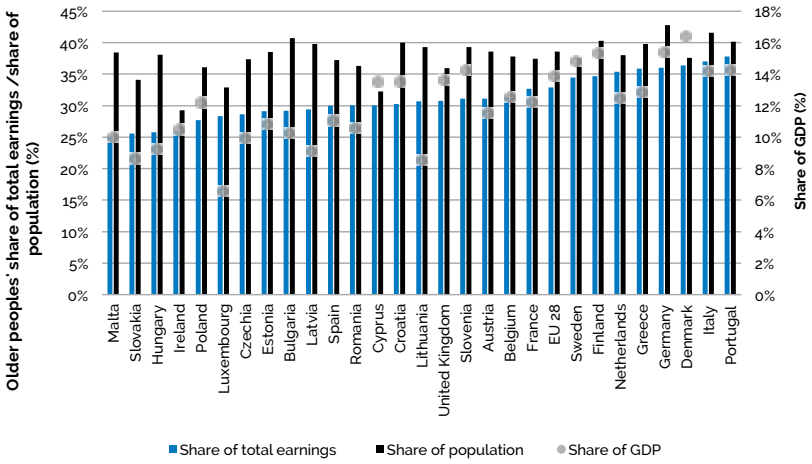
As older people increasingly work and earn for longer, the importance of their incomes to the economy grows.

Earnings of those aged 50 and over accounted for 14% of GDP and 1/3 of total earnings across the EU in 2014.

In the EU, those aged 50 and over comprised around 44% of the population in 2014, while their earnings made up around 14% of GDP and 33% of total earnings (Figure 9).

There was significant variation across different EU countries; older people's earnings comprised 36 to 38% of total earnings in Germany, Denmark, Italy and Portugal but only around 25% in Malta. Where their contributions to total earned income and GDP were highest, their share of the population was also relatively high. But differences in older people's population share does not explain the whole story. In Sweden and Denmark, their earnings contributed around 16% of GDP; this was far higher than in Malta and Hungary, which have a higher proportion of older people. This may be because employment rates for people aged 50 to 69 were relatively high in Denmark and Sweden compared to Malta and Hungary.

Figure 9: Change in older peoples' share (aged 50+) of total earnings and GDP, EU-28 (2006 to 2014)



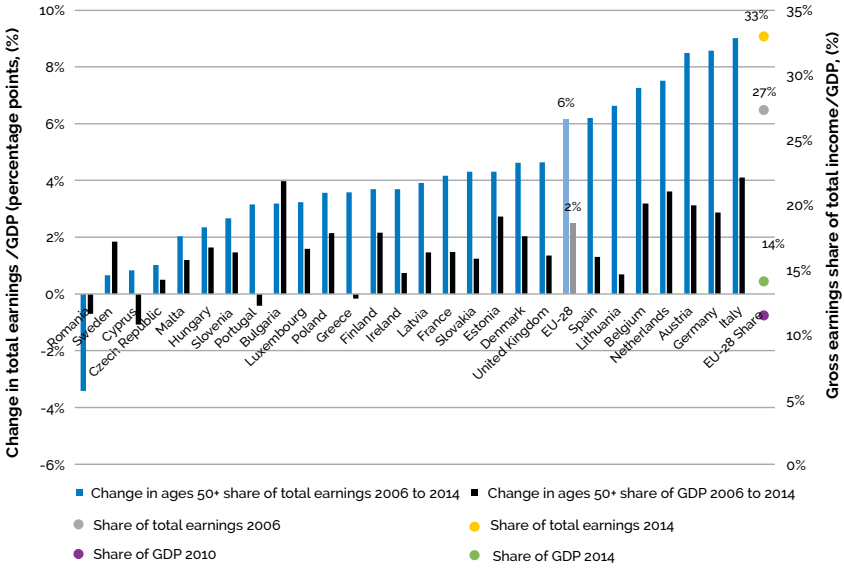
The earnings of those aged 50 and over account for a growing share of GDP and earned income across the EU - especially in countries where employment rates at older ages are rising fast.

As older people make up more of the workforce, their earnings are increasing and accounting for a growing share of total earnings. They are becoming more important to the economy and overall GDP.

Figure 10 shows that from 2006 to 2014, their gross earnings rose from comprising 12% to 14% of GDP and from 27% to 33% of total earnings. Our economies are increasingly reliant on them.

Again, there is significant variation in these trends across countries – their earnings have increased particularly quickly in Italy and Germany, while falling in Romania. While the populations of Italy and Germany have aged relatively quickly over the time period, employment rates for older ages also rose in these countries.

Figure 10: Change in older people's (aged 50+) share of total earnings and GDP, EU-28 (2006 to 2014)



People aged 50 and over make up 37% of the G20 population, but generate every third dollar earned.

The economic contributions of people aged 50 and over are significant across the G20. They average around 33% of total earnings while making up 37%[h] of the population. These contributions are especially high in the US and Japan – in 2018 this cohort generated nearly 4 out of every 10 dollars earned, accounting for around 15% of GDP in the US and 26% in Japan (Figures 11 and 12). These earnings are especially significant to the US economy relative to this cohort's proportion of the population. Their share of total earnings has exceeded their population size since 2014.

The market contributions of people aged 60 and over are also significant. This is particularly true in Japan, where their earnings accounted for 14% of total earnings, and over 9% of GDP, in 2018.

[h]This statistic refers to the G20 economies in Figure 11 (for which earnings data by age group was available).

Outside the EU, trends are more mixed, due to volatile employment rates and wages.

Beyond the EU, trends in older people's earnings and their importance to the economy are more volatile across G20 members. In some countries their gross earnings are becoming more significant to the economy, but not in all countries at all times (Figures 11 and 12).

Figure 11[i]: Gross earnings of those aged 50 and over, as share of total earnings for G20 members (2002 to 2035)

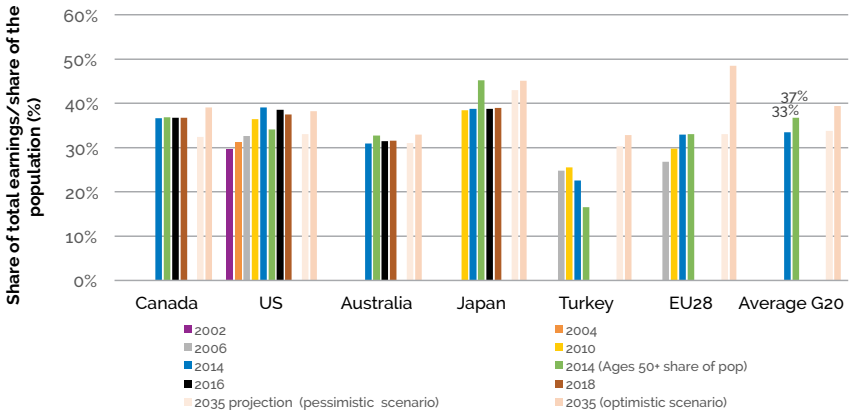
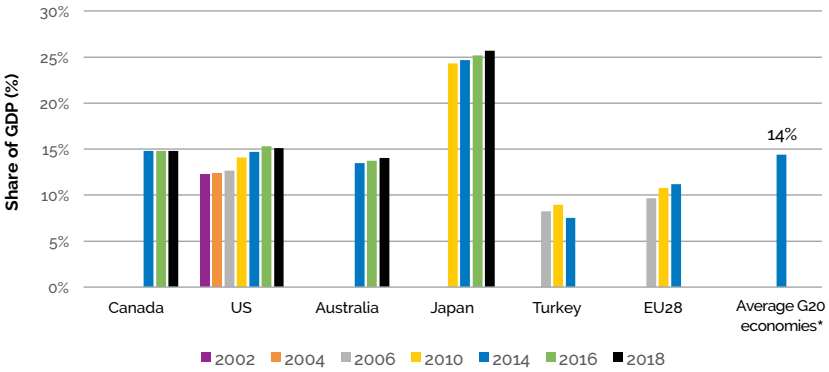


Figure 12: Gross earnings of those aged 50 and over, as share of GDP for G20 members (2002 to 2018)



[i]"Average G20" refers to the G20 members in the graph where the relevant data was available.

A similarly mixed picture is revealed when examining this cohort's net earnings, although as net figures are likely to be affected by tax changes they must be interpreted more cautiously. Data is also available for South Korea, China and a number of EU countries.

The net earnings of people aged 50 and over have generally increased since 2002/6, but have fluctuated for certain countries and years. Our analysis also showed that the proportion of GDP represented by this cohort's net earnings has increased in Korea, but remained stagnant in China.

If past trends in employment rates continue, this cohort's earnings will generate nearly 40% of all earnings across the G20 on average by 2035.

When considering projections for future (as in Figure 11), we can see that older people's earnings are projected to increase in both the pessimistic and optimistic scenario. Yet they are only expected to account for a greater share of total earnings in the optimistic scenario. In this case, their earnings would account for an average of around 39% of earnings across the G20, and 48% in the EU, which is sizeable considering their population share is expected to be 35%[j] across the G20 and 45% in the EU.

Why is this happening?

These volatile trends in the economic impact of older people's earnings may partly be explained by fluctuations in their employment rates and salaries. Before 2014, average US salaries for older people were increasing relative to younger age groups, but since 2014 they have been falling. Canadian salaries for people aged 50 to 64 have also fared relatively poorly in recent years, compared to other age groups. Moreover, while employment rates for those aged 50 to 64 and 65 to 69 have decreased in China and Turkey since 2000, they have increased relatively quickly in Japan, Korea and the EU.

Maximising the longevity dividend

Why this matters

The potential economic impact of enabling more older people to work for longer is significant.

[j]Referring to the G20 members shown in Figure 1.

If all G20 members employed the same proportion of older people as Iceland, earnings would go up by USD3.7 trillion – around 7% of GDP on average.

Addressing barriers to employment for older people and incentivising work in later life comes with a substantial prize (Tables 1 to 3). If the G20 members we studied had seen the same proportion of people aged 50 and over in employment as Iceland in 2014, earnings would have been increased by USD3.7 trillion. That's around 7% of GDP on average across G20 members for that year.

Table 1: Gains for employing the same % of people aged 50 and over as Iceland (72%)

G20 member	Gain in earnings (USD)	% of GDP
Turkey	117 billion	13% of GDP
EU	2,476 billion	11% of GDP
US	703 billion	4% of GDP
Canada	77 billion	4% of GDP
Australia	66 billion	5% of GDP
Japan	210 billion	4% of GDP

Table 2: Gains for employing the same % of people aged 50 to 59 as Iceland (88%)

G20 member	Gain in earnings (USD)	% of GDP
EU	489 billion	3% of GDP
Turkey	52 billion	6% of GDP
Japan	68 billion	1% of GDP

Table 3: Gains for employing the same % of people aged 55 to 64 as Iceland (84%)

G20 member	Gain in earnings (USD)	% of GDP
US	496 billion	2% of GDP
Canada	53 billion	3% of GDP
Australia	37 billion	3% of GDP

The impact would be greatest for countries with relatively low employment rates for older people, but even Japan, which has relatively high employment rates already, would have seen an additional 4% rise in GDP. As Japan has employment rates close to Iceland's for the lower age range, the largest benefits would have accrued by boosting employment rates for people aged over 65.

These economic gains will likely multiply as our populations age. G20 leaders will need to act fast to maximise the gains from this opportunity and not let their economies lag behind other countries who seize it.

The shift towards longer working lives is likely to provide more job opportunities for all generations – due to spending by older people.

It is often claimed that the trend for older people to carry on working will limit job opportunities for younger workers. This perception may have influenced retirement policies in a number of countries.[78] With significant and growing intergenerational inequality in many countries,[79] this would have particularly negative consequences if true. But the idea that there is a fixed number of jobs in any economy is known as the *lump of labour fallacy*.

Numerous studies have shown this is not the case. There is no evidence that increased employment of older people reduces either job opportunities or salaries for younger workers.[80] This is even true during recessions, according to a recent OECD paper.[81] If anything, evidence points to the opposite – overall employment rises.[82] There is even some evidence that younger people's wages would increase.[83]

When an economy has more spending power, more jobs are created, as we saw when World War II led to a dramatic increase in the number of women working. Increased spending power results in increased economic activity and employment, benefitting all generations.[84]

This is why policies aimed at improving younger people's employment outcomes by encouraging older people to retire early have often resulted in the opposite effect.[85]

Longer working lives in the context of the pandemic

As the COVID-19 pandemic wreaks havoc on the global economy, the central question plaguing policy makers is how to recover as quickly as possible. As firms are forced to cut jobs, many argued that older workers should be let go first, to make way for younger workers who may have more to lose.[86] But as we've seen, this attitude is based on the *lump of labour fallacy*.

There are other reasons why this is a bad idea, both in the short-term and, in particular, in the long-term.

Older workers who lose their jobs are more likely to leave the labour market for good – affecting long-term labour supply.

We saw that older workers are less likely to find work again after losing their job.[87] This could significantly hamper recent progress addressing possible labour shortages due to demographic change.[88] Many studies conclude that without extending our working lives, there will be a labour shortage,[89] even with new technology designed to address this.[90]

This could significantly reduce retirement incomes just as many countries reform their pension systems to increase sustainability.[91] Many prospective retirees may face inadequate retirement incomes if they can't work beyond the current retirement age.[92]

There is no evidence that older workers are less productive, but there is evidence that age-diverse workforces might be more productive.

Studies have found no evidence that productivity falls with age across a variety of sectors. Some have found the opposite.[93] While some mental capabilities fall with age, others improve.[94] At the same time, there is an emerging body of evidence that age-diverse teams are more productive, especially in workplaces where there has been awareness-raising around age.[95] We already know that productivity is enhanced by the different perspectives granted by gender, ethnicity and race diversity.[96] The same applies to age diversity. Countries that incentivise employers to tap into this opportunity may gain a competitive advantage.

Furthermore older people bring a range of human skills that are likely to be highly valued as technology changes the job market.[97] Decision-making, leadership and empathy are areas where AI cannot compete, but they are also areas where older workers have a relative advantage.[98]

However, many older people work in industries in which they are at risk of being displaced by technology.[99]

We therefore need to act to shape the impact of technology on society – including by incentivising the development of technologies that enhance the productivity of workers.[100]

There is potential to ensure that the two key trends of technological change and ageing complement each other. However, specific action to include older workers, and to invest in lifelong learning, will be vital.[101]

Short-term benefits of employing older workers.

In the context of the pandemic there are a number of short-term benefits to retaining older workers. They're likely to have the experience, resilience and judgement to respond quickly during crises.[102] They also tend to be loyal employees and so likely to reduce turnover costs during a volatile economic period.[103] They may also be able to use their extensive experience to train less experienced colleagues if training budgets are cut.

What can be done?

Wide variations in employment rates across countries suggest that action at a country level makes a difference.

In some countries – such as Greece, Spain and South Africa – unemployment rates are relatively high, and labour market participation rates significantly exceed employment rates. This means that a significant number of older people are looking for work, but are unable to find it.

These countries could improve employment outcomes in later life by prioritising reducing obstacles to work and increasing the number of jobs available to older people. This is over and above incentives to increase the labour supply.

But unemployment rates may significantly underestimate the number of older people who want to work but are unable to do so,

by ignoring the many older workers who become discouraged and leave the labour market following long-term unemployment.[104]

Health, education and retirement policies appear to be important factors in explaining differences in older age employment rates across countries.

- Countries with higher levels of health and education and less generous pension policies/higher retirement ages tend to have higher employment rates at older ages.[105] While some studies suggest health, education, and retirement policies are important, others find retirement policies to be the only significant factor.[106]
- Fewer studies have examined the relationship between measures of health and employment rates at the country level rather than for individuals.
- An OECD index finds higher employment rates at older ages in countries with strong financial incentives to continue working for longer, which encourage employers to retain and hire older workers, and which promote employability throughout the working life.[107]

We can act to remove many of the barriers to working for longer:

- **Preventing poor health:** the global disease burden could be reduced by about 40% over the next 20 years with preventative health interventions.[108]
- **Adapting workplaces to poor health:** people with long-term conditions and disabilities can continue to work if provided with appropriate support by their employers.[109]
- **Tackling age discrimination:** age discrimination is a significant barrier to working across countries. While banned by legislation in virtually all OECD countries, it remains very common as legal action remains costly, complex and time-consuming.[110]
- **Providing flexible work opportunities:** flexible working allows those with health or care needs, those who need to provide care, or those who desire to retire flexibly to remain in work.[111] Only 39% of employers offer flexible time schedules in the US[112] and Europe, 78% of older workers cited a lack of gradual-retirement opportunities as an important reason to stop working altogether.[113]

- **Providing training opportunities:** a lack of lifelong training and development, and education in later life, holds older workers back.[114] Lifelong learning programmes can ensure older adults have the right skills and opportunities to work for longer alongside rapid technological change, whilst simultaneously having the ability to lead a fulfilled, well balanced, 'multi-stage' life.

Governments can provide incentives, regulation or legislation to protect older workers and encourage employers to support them through flexible work and training.

Governments must protect the rights of older workers through age discrimination laws; the G20 took steps to ensure this in 2015, but must go further by guaranteeing that the rights of older workers are enshrined in employment law for all G20 members. They should also explore new ways to ensure that existing age discrimination laws are actively enforced, for instance, by incentivising employers to adopt appropriate hiring technologies.

This could involve:

- Removing mandatory retirement ages.
- Facilitating phased-in retirement by enabling people to draw down flexibly on the state pension and private pension pots.
- Providing adequate formal care services, so that no one is forced to leave the labour market for care-giving.
- Raising pension eligibility ages in line with life expectancy.
- Introducing financial incentives to work past the pension eligibility ages.
- Providing targeted unemployment support for older workers.
- Ensuring new jobs directly created by government spending are appropriate for longer working lives and varying health needs and capacity.

Governments could ensure incentives and/or regulations are in place for employers to:

- Hire older workers.
- Support flexible working.
- Provide training for older workers (including on emerging digital technologies).

- Provide opportunities for employees in physically demanding jobs to retrain into more appropriate roles.
- Adapt workplaces for people with disabilities and other health needs.

Existing G20 policies

Across the G20, employment policies have been aimed at helping to increase employment among older populations. Policies have been structured around a number of incentives, including:

- Providing older people with employment flexibility (i.e. allowing people who work past the age of pension eligibility to draw down flexibly on the pension).
- Financial incentives for employers to hire older workers.
- Measures to help the older unemployed.
- Offering adult education/lifelong learning courses.
- Tax incentives for older workers.
- Age-inclusive workplace adaptations.

These include:

- Policies that allow retirees to continue working while still claiming a state pension, offering flexibility for older workers:
    - In Russia people can continue working after reaching retirement age, while taking 'retiree' status and receiving a government retirement allowance.[115]
    - The US passed legislation in 2012 that allows older people to work part-time while receiving partial retirement benefits.[116]
    - In Brazil adults can combine income from pensions and salaries.[117]
- Incentives for employers to hire older workers:
    - In Australia a salary subsidies system incentivises employers to hire older workers; the number of older workers increased considerably after implementation.[118]

    - In the UK, the Department for Work & Pensions policy paper *Fuller Working Lives* encourages businesses to retain, retrain and recruit older workers.[119]

- Unemployment support for older workers:
    - In Japan, 'silver human resource centres' give support and advice to jobseekers aged over 60; jobcentres match clients with businesses based on applicants' skills and experience.[120]

- Adult education and lifelong learning courses for older workers:
    - In Russia, 'third age schools' teach older people new skills, such as computer training and language courses.[121]
    - The US Department of Labour has an Aging Worker Initiative, which provides grants to organisations that develop education and training programmes for aging workers, as well as job referral services.[122]
    - Beyond the G20, Singapore launched a life-long learning programme in 2014, which provides every Singaporean aged 25 and over with credit for skills-based courses; this does not expire and the government provides periodic top-ups.[123] Hong Kong has set up 'Elderly Academies' to encourage older people to take part in education, while normalising their place in the classroom for young students, and supporting inter-generational harmony.[124]

- Tax incentives to encourage older workers to remain in the workforce:
    - In 2007, Sweden introduced two tax reductions to help workers aged over 65, by offering tax credits and reducing older employees' social contributions by around 16%.[125]

- Initiatives and proposals to encourage employers to make their workplaces more inclusive for older workers:
    - South Korea signed a Tripartite Agreement between government, trade unions and employers' representatives in 2015, which pledged to "make

workplaces more favourable for older workers" by providing a lifelong career development programme, developing jobs suitable to older workers, making workplaces more favourable for older workers, and promoting outplacement services.[126]

- Across Europe, employers and unions are collaborating on the development, piloting and implementation of new approaches to redesigning work to be more inclusive, with support from EU funding.[127]
- Beyond the G20, Norway introduced an Inclusive Workplace Agreement in 2001, which encouraged companies to develop more senior-friendly policies and implement special measures to retain older workers. The three aims were to reduce sick leave, increase employment of people with reduced functional ability, and extend the effective labour market exit age for an employee aged 50 by six months.[128]

Unpaid contributions

Patterns in older people's unpaid contributions

What's happening?

In this report we examine the unpaid contributions older people make through volunteering, looking after grandchildren and providing informal care. The literature demonstrates that:

- Poor health can be a significant barrier to older people making unpaid contributions.
- Poor physical and mental health (both self-rated and objectively measured) are associated with reduced volunteering (although a few studies find mixed results), despite the health boost experienced from volunteering.[129]
- Studies looking for causal relationships between health and volunteering find that poor health, particularly worsening health (such as depression and mobility limitations)[130] and limitations to activities of daily living[131], reduce volunteering activities.
- Poor health is generally a barrier to caring, while intense caring activities can also cause poor health.[132]
- Studies show that grandparents in poor health are less likely to look after grandchildren (and caring intensely for grandchildren can also cause poor health).[133]
- Recent studies have also shown that poor health (particularly health shocks such as heart attacks, strokes, and onset of cancer) can reduce unpaid contributions.[134]

Our analysis: Unpaid contributions across the G20

What's happening?

People aged 65 and over spend more time volunteering and caring than any other age group.

Figures 13, 14 and 15 show that people aged 65 and over spend a significant amount of time caring for an adult household member, volunteering, and helping other households. Across Europe, these contributions average 124 hours per person, per year.

This cohort spends more time volunteering and caring than younger age groups across a number of EU countries and other G20 members where data is available (Figures 13 and 14).

Figure 13: Average annual hours spent caring in the household, by age, in G20 members (2010)

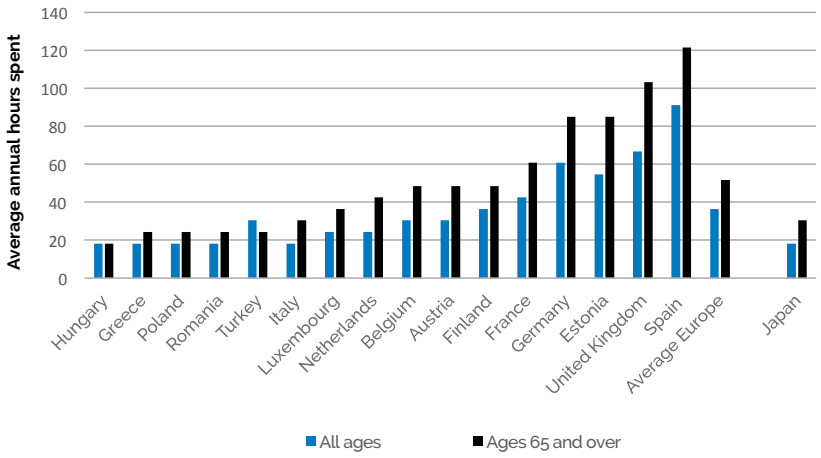
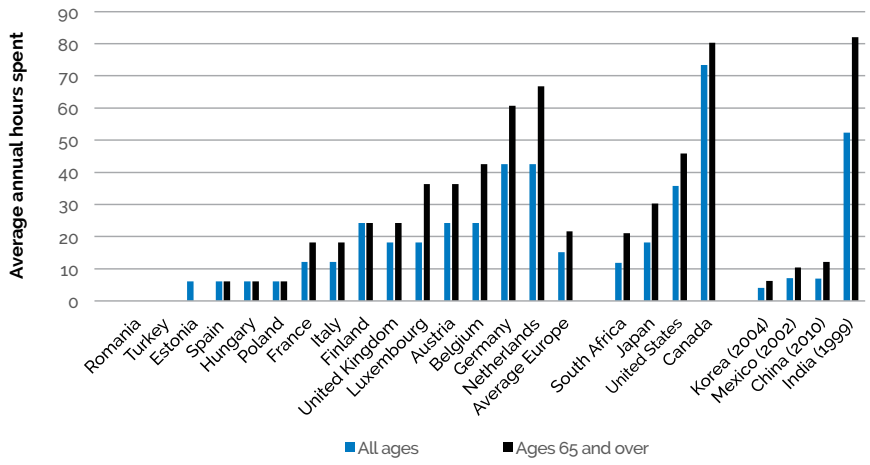
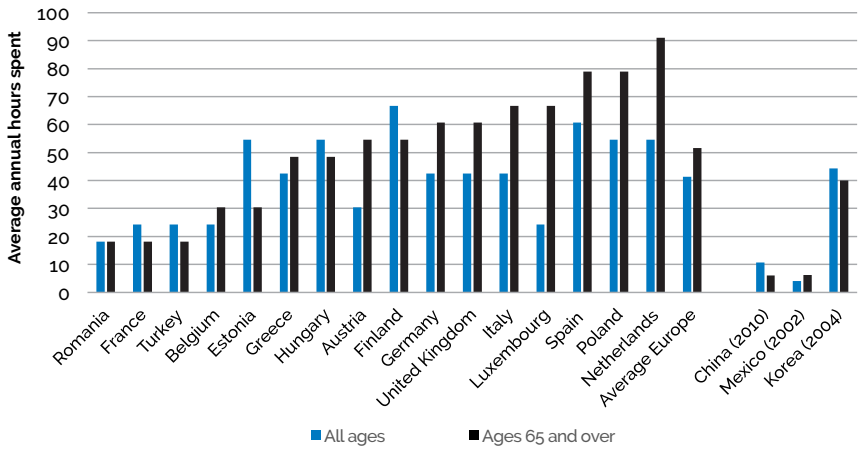


Figure 14: Average annual hours spent volunteering, by age, in G20 members, in Europe (2010) and outside of Europe (other years)



The picture is more mixed when it comes to time spent informally helping other households (such as caring for grandchildren or non-household members) (Figure 15).

Figure 15: Average annual hours spent helping other households, by age, in G20 members in Europe (2010) and outside of Europe (other years)



The level of older people's unpaid contributions differ significantly across countries, although only European data is harmonised and therefore fully comparable:

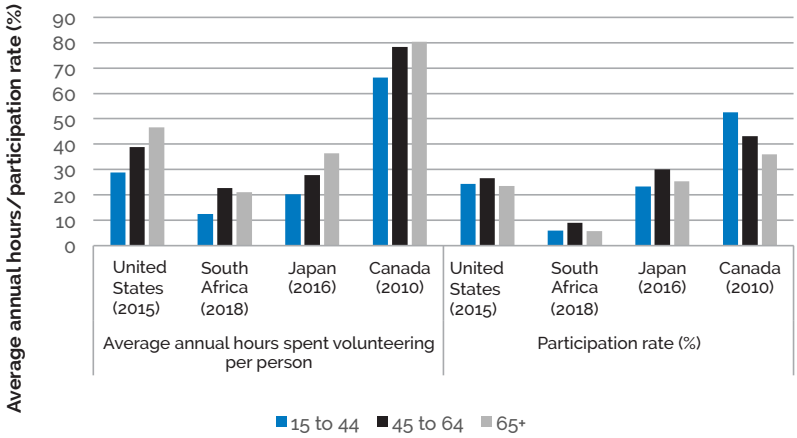
- In the Netherlands, older people spend an average of 67 hours volunteering and 91 hours informally helping other households; in Spain, they spend 121 hours caring each year.
- This compares to Spain, Romania, and Hungary, where they spend on average 6, 18 and 18 hours volunteering, informally helping other households and caring, respectively.
- In India and Canada the number of hours older adults spend volunteering per year is especially notable, at 82 and 80, respectively.

Time spent volunteering per person increases with age, but the number of volunteers falls after the age of 65 in many countries – potentially due to worsening health.

While volunteers aged 65 and over spend more time volunteering than younger volunteers in nearly all countries, volunteering participation rates in many countries peak at ages 45 to 64 and fall

as people get older (Figure 16). More recent data from a harmonised European survey in 2017[135] reveals similar findings: in some countries participation in volunteering is highest for people aged 65 and over, while in many others they peak at ages 50 to 65.

Figure 16: Volunteering: participation rate and average hours per person by age, in non-EU G20 economies



Why is this happening?

Older individuals may spend more time volunteering, but the number of people participating goes down with age. This may be because we tend to have more free time as we age, allowing extra volunteering hours, but we are more likely to have declining health, decreasing the available pool of volunteers.[136] If countries invest in health to unlock the full potential of older people, they could see a significant impact on overall hours spent volunteering.

Our analysis: Understanding the economic value

What's happening?

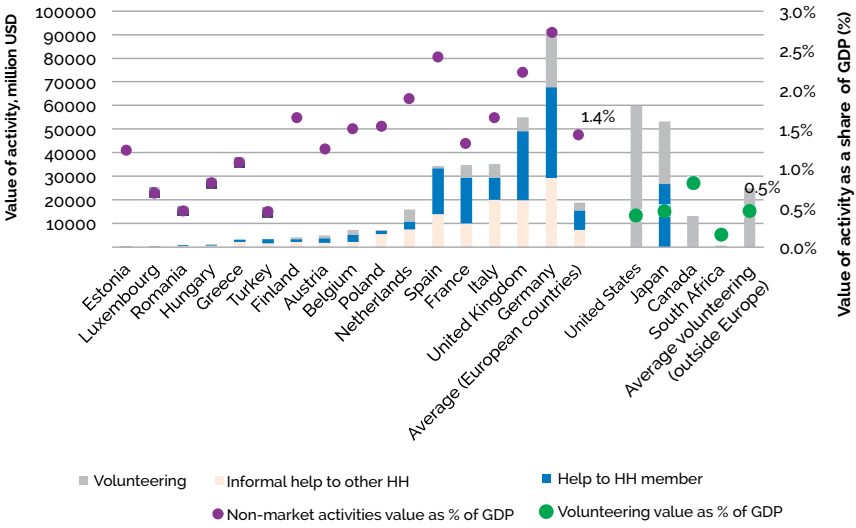
Productive non-market activities by people in the EU and Turkey aged 50 and over were worth 1.4% of GDP in 2010 – more than what the EU spends on defence.

In 2010, the average economic value of unpaid contributions by people aged 50 and over was around USD19 billion across the European countries of the G20 studied, totalling 1.4% of GDP (Figure 17). This is more than the average spending on defence across the EU-28 countries in 2018 (1.2% of GDP).[137]

There was wide variation across countries, with the value of these contributions reaching 2.7% in Germany, 2.4% in Spain and 2.2% of GDP in the UK.

Outside Europe volunteering activities were worth on average 0.5% of GDP (Figure 17). In Canada they were worth 0.8% of GDP. In Japan, volunteering and caring was worth nearly 1% of GDP – just under a third of its spending on education at 3.2%.[138]

Figure 17: Estimated value of non-market productive activities by people aged 50 and over, G20 members (2010)



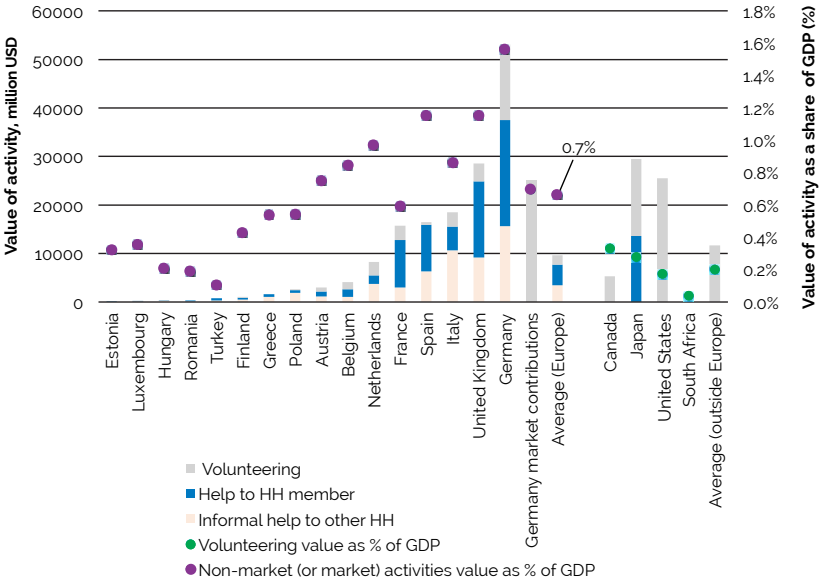
The economic contributions of people aged 65 and over were also significant – these averaged around 0.7% of GDP across the European countries above in 2010, which was equivalent to the value of their earned income to GDP that year (Figure 18).[k]

The contributions made by this cohort were particularly significant in Germany (1.6% of GDP) and the UK (1.2%) – comparable to the 1.2% the EU spent on defence. Note that employment rates for people aged 65 and over in Germany and the UK are relatively low compared to other countries.

These findings overtly challenge the negative narrative that portrays older people as adding little value to society.

[k]The market contributions of adults aged 65 and over across the EU were worth an estimated 0.7% of GDP in 2010 (based on ILC calculations using same approach used to estimate market contributions by adults aged 50 and over).

Figure 18: Estimated value of non-market productive activities by people aged 65 and over, G20 members (2010)



Maximising the longevity dividend

Why this matters

Ignoring non-market activities leads us to misunderstand the economic challenges and opportunities of ageing.

If we discount the unpaid contributions of older people we may significantly underestimate their total economic contribution and may overstate the economic costs of ageing.[139] Unpaid contributions can benefit the formal economy via positive externalities and reduce government spending.

Ignoring the trade-offs between market and non-market participation can lead to unintended consequences.

We also may misjudge the wider economic and social impact of increasing market contributions, given this may reduce time spent on unpaid contributions, such as informal care for adults, and grandparenting. This is important, as if we incentivise older people to remain in paid work, we may lose these unpaid activities, which might have to be replaced with paid labour.

Policy makers must consider these trade-offs, especially as the demand for care and grandparenting is expected to increase as populations age, as more women take up paid employment, and as the proportion of single-parent families increases.[140]

Unpaid contributions in the context of the pandemic

The pandemic has highlighted unpaid contributions and exposed the danger of undervaluing both formal and informal care.

The value of older people's unpaid contributions has been particularly noticeable during the pandemic. In the UK the number of older people helping those outside their household, who are sick, disabled or at risk, has significantly increased (a similar picture is revealed across countries).[141,142] And millions of people (most commonly aged 50 to 69) who care for someone they live with[143] have had to do so in more difficult circumstances. This risks compromising their freedom and mental health.[144] These contributions have been immensely valuable, keeping vulnerable people safe and reducing pressure on already strained formal care and health services.

The value of formal care services has become more obvious. While care workers are often poorly paid, and denigrated as 'unskilled' and as having 'low-status', they have now been recognised as key workers who we have relied on during the pandemic.

But the pandemic has also exposed the dangers of undervaluing care work. Already chronically underfunded, care homes often faced delays in receiving resources, including protective equipment, and accurate statistics on their death rates were often reported too late. Underfunding may therefore have resulted in a disproportionately high number of deaths in care homes across countries.[145]

What can be done?

Across countries, unpaid contributions can be affected by a range of factors – a considerable number of which are in the control of policy makers.

- Health and education are factors that can help explain differences in volunteering in later life across countries.[146]

- Another is culture, especially the family network's level of informal social relations, which can crowd out formal social participation.
- Civil liberties (including religious and political freedoms) are also important, as they affect whether people can participate.[147]
- Across Europe, grandparenting is more common in countries with higher maternal employment rates (like France, Sweden and Denmark).[148]
- Informal care is most common in countries with:
    - older populations and poorer health outcomes that increase demand;
    - less public provision of formal care; or,
    - more support for carers, e.g. financial support or more flexible work practices.[l]

Poor health is a barrier to these activities at the individual level.[149] However, the extent to which poor health acts as a barrier to volunteering, providing care, or grandparenting across countries has been examined less.

Existing G20 policies

Throughout the G20, policies to help those making unpaid contributions, whether informal care, grandparenting or volunteering, have been adopted. These include:

- Implementing tax breaks, care incentives or support to save for retirement to aid grandparenting:
    - In the UK, grandparents who provide childcare to under-12s can claim National Insurance credits towards their basic state pension.[150]
    - In Portugal, grandparents may take a financial allowance to support teenage parents.[151]

[l]This is most widely found in countries that have either low support for long-term care or a strong emphasis on cash benefits that can be used as additional household income or to pay informal carers.

- Allowing parental leave to be transferred to grandparents:
  - In Germany and Hungary, parental leave can be transferred to grandparents.[152]
  - In the UK, working grandparents can take time off work and share parental leave pay to help care for their grandchildren.[153]
- Recognising and financially supporting informal care work:
  - In Italy, where caring for elderly relatives is common, the government provides a fixed monthly benefit of €508 to the families of non-self-sufficient people aged over 65, regardless of their income.[154]
- Promoting and creating inclusive volunteer opportunities for older people:
  - In 1995, the German government launched sponsored volunteer programmes to help connect older people with volunteer opportunities - these now have over 200 offices across Germany today.[155]

Consumption

As the cohort of people aged 50 and over have an increasing tendency to work and earn, they are transforming and supporting the economy by spending their earnings.

Spending patterns among older people

What's happening?

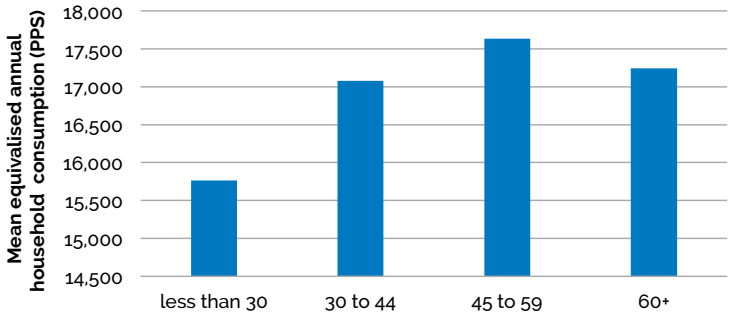
Older adults underspend on goods and services.

Previous research finds that:

- Consumption steadily flattens out soon after retirement, and continues to fall as people get older. This decline appears to be persistent over time, although it may be shifting to older age ranges in the UK.[156]
- Many countries see this decline, including G20 members such as Europe (including the UK,[157] Italy,[158] Germany[159]) and the US,[160] Brazil,[161] Korea,[162] China,[163] Japan,[164] Australia,[165] and Canada,[166] as well as non-G20 economies including Malaysia[167] and Iceland.[168]
- In some countries – such as China and Italy – the decline is mainly due to a fall in work-related spending.[169] In others, such as the UK, the US, Iceland, Germany and Brazil, spending on non-essential items, such as leisure and recreation, also falls as people get older.[170]

Consumer spending across the EU falls after the age of 60, even when accounting for the number of people in the household (Figure 19). This is largely correlated with reduced rates of employment in later life, and the subsequent reduction in income. Reducing barriers to older people's employment may therefore also bring benefits in terms of consumption.[171]

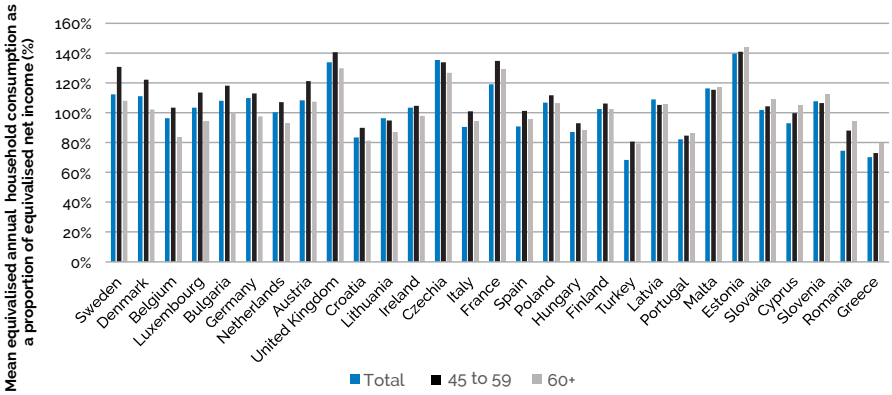
Figure 19: (Equivalised) annual household consumption across the EU, by age (2015)



However, in a number of countries (including the US, the UK, Italy, Germany and Iceland), the drop in income during retirement cannot fully explain the drop in spending. Spending as a share of income continues to fall as people get older, while savings increase.[172] In the UK, it is estimated that 80-year-olds save an average of £5,870 a year[173], and rather than being invested productively, these savings often end up in low-interest bank accounts.[174]

Similarly, in many EU countries (beyond those just discussed), this drop in spending cannot be fully explained by falls in income, since spending as a share of income also drops (Figure 20). These households have the means to spend more than they do at present. At the other extreme, in a number of less advanced EU economies, spending as a share of income increases with age, which could indicate growing poverty and debt as people get older (Figure 20).

Figure 20: Average (equivalised) household consumption as a share of income, by age, Europe (2015)



Why is this happening?

This decline in spending and/or increase in savings in later life challenges economic theory, which predicts that people will smooth their consumption over their lifetime, anticipating the expected drop in income upon retirement and saving in advance. There are two main theories as to why these patterns occur: [175]

1. People accumulate excessive savings for retirement: uncertainty gives rise to precautionary savings, and imperfections in the capital markets limit households' ability to save and borrow over time.

2. People accumulate inadequate savings before retirement[176] and must enter retirement with sub-optimal saving levels, forcing them to reduce consumption.

The evidence also suggests that poor health and other factors, that are largely avoidable, can hold back older people's expenditure. For instance, unexpected retirement due to health shocks, may explain part of this drop in spending – which, given this cannot be planned for, is consistent with economic theory, but health may also affect consumption independently of income:

- In the UK, poor health and particularly poor mobility are negatively correlated with consumption as people get older. This is accentuated for non-essentials, once disposable

income and other factors are accounted for. So health may affect consumption independently of income, for instance by making it difficult for people to get to the shops or enjoy leisure activities.[177]

- Unexpected health shocks can lead to involuntary retirement and a drop in spending in later life.[178] The spending decline is most likely to be connected to the wealth shock of unexpected retirement.[179] Some studies find that unexpected retirement – for any reason – is generally the main reason why spending declines.[180]

- Other factors include: non-inclusive goods, services, retail areas and neighbourhoods; lack of innovation in products and services; and a tendency to make precautionary savings.[181]

However few studies have examined these correlations at a country level, as we go on to do.

Our analysis: Spending in older households across the G20

What's happening?

Older households dominate consumer spending across the G20. Their spending and market share is rising – from 54% in 2010 to 56% in 2015.[m]

- In 2015, G20 households headed by people aged 50 and over spent USD9,669 billion[n] – more than the combined GDP of Japan, Australia, Canada and Brazil (Figure 22).

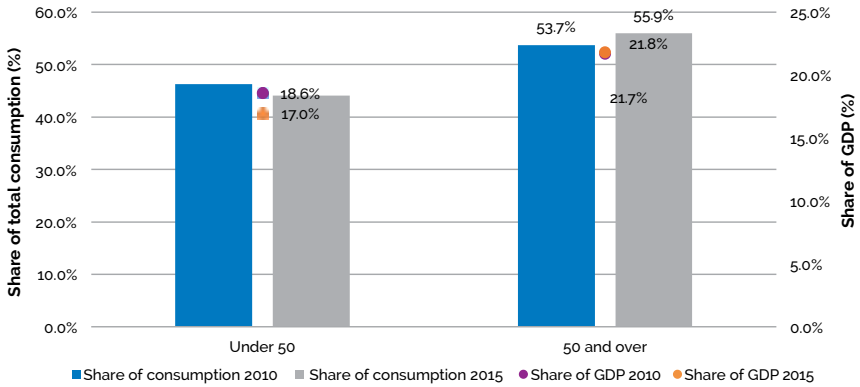
- This is an average of USD 275 billion per year, per G20 country,[o] equivalent to roughly 56% of total household consumer spending (Figure 21).

- G20 economies rely on this cohort; their spending accounts for nearly a quarter of GDP (22%) on average – slightly higher than the 17% generated by spending in younger households.

[m]These figures consider the average share of consumption for older households in the countries in Figure 22, using 2010 and 2015 data (Brazil was not included in this average as data wasn't available for 2015).
[n]This refers to the combined household spending for older households in the G20 members in Figure 20. 2010 data was used for Brazil (converted to 2015 prices) as 2015 data wasn't available.
[o]All consumption data relates to household consumption rather than expenditure - although the US data is derived from individual data.

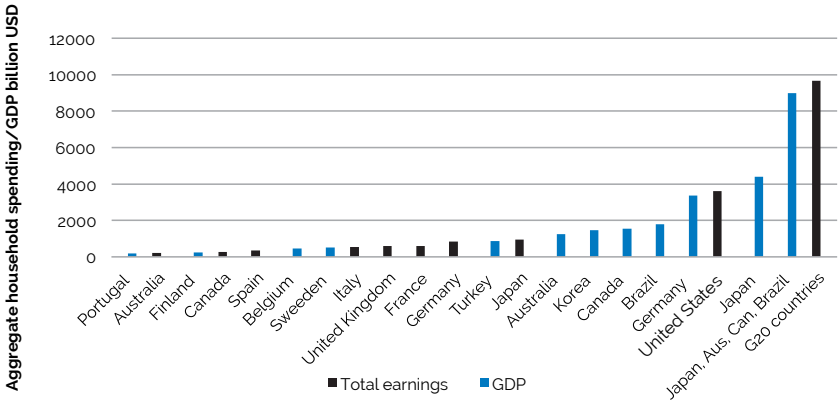
- This cohort's spending (in national currency)[p] is growing over time, by an average of 9% from 2010 to 2015 across G20 economies.
- It's also growing at a faster rate than younger households (which fell by 3% over the same time period).
- This means their market share grew from 54% to 56% during that time.
- Older households spending as a share of GDP also increased slightly (from 21.6% to 21.7%) but for younger households spending fell slightly (from 18.7% to 17.1%).[q]

Figure 21: Household consumption, by age, as a share of total consumption/GDP, averaged across G20 economies (2010 to 2015)



[p]Due to volatile (US) exchange rates in 2015, we used national currencies to examine consumption trends over time. See https://money.cnn.com/2015/03/16/investing/us-dollar-fastest-rise-40-years/index.html.
[q]These figures take each G20 country's total spending for older households as a share of GDP and take the average of this across all the G20 countries in Figure 22. Data for Brazil was not included in the average figure for 2015.

Figure 22[r]: Aggregate consumption for households aged 50 and over in G20 members (2015)



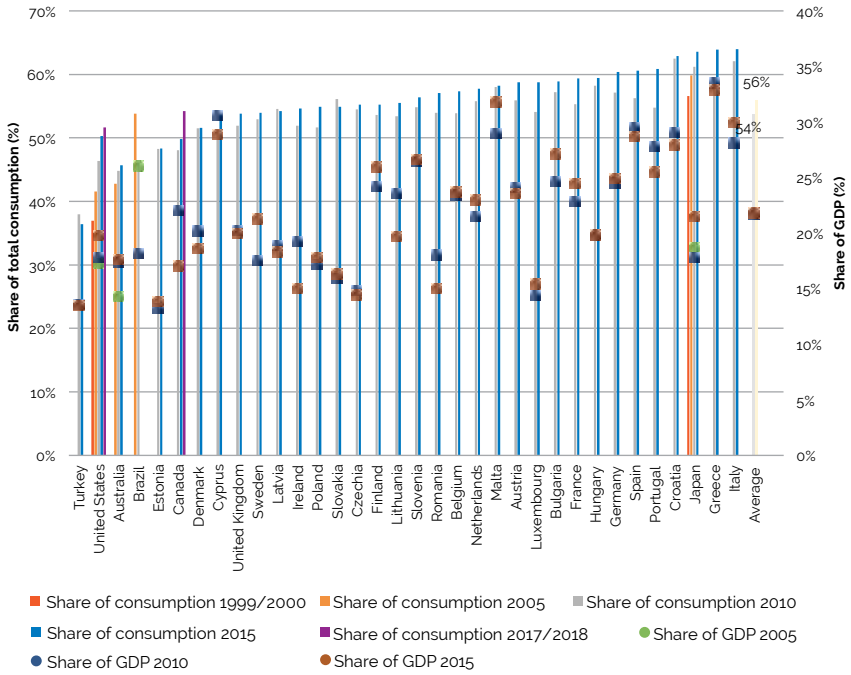
Older households' consumption and share of the consumer market/GDP is growing for most G20 members.

Interestingly, these trends hold across most G20 members (Figure 23). Households led by people aged 50 and over account for more than half of total consumption in all but four of these countries; consumption has generally increased from 2010 to 2015. This trend is also seen (over a longer time period) in the US, Australia, Japan, and Canada.

Because spending as a share of GDP is volatile, it's harder to identify trends for this measure. The majority of countries saw older households' spending rise as a share of GDP, but spending also fell in a sizeable number of others. But across the board, older households' share of GDP compares well to that of younger households in nearly all G20 members.

[r]The aggregate expenditure total for G20 members refers to the countries in figure 23. The data for Brazil is from 2010 converted to 2015 prices, as 2015 data wasn't available.

Figure 23: Share of total consumption for households aged 50 and over in G20 economies

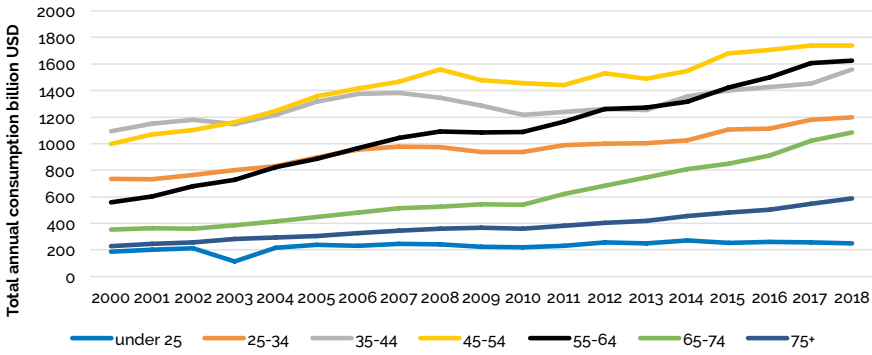


Consumption has grown for individuals aged 55 to 64 and 65 to 74 in the US.

The US offers individual rather than household data, which gives a more accurate picture of consumption by age.[s] Figure 24 reveals particularly strong growth in spending by those aged 55 to 75, compared to other ages, since 2011. (This matches similar trends identified in the UK.[182])

[s]It is harder to isolate older adults' consumption using household level data: older households may also include younger adults, which may influence household consumption measures.

Figure 24: US total annual consumption by age group (2000 to 2018)



Based on past trends, people aged 50 to 64 are set to overtake those aged 45 to 64 as the cohort where aggregate spending peaks.

The growth in older consumers' spending and market share may relate to a relatively rapid increase in spending levels compared to younger age groups.

In the majority of G20 members, average annual household spending by those aged 50 and under exceeds that of older households.

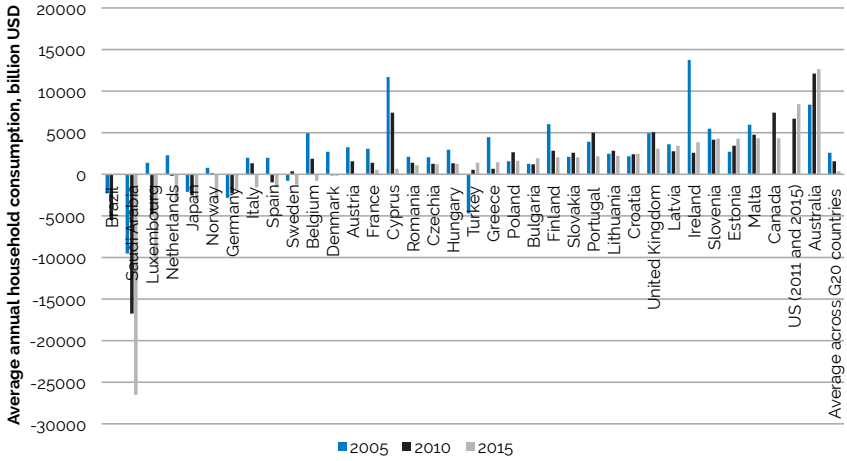
More detailed breakdowns by age in Canada, the US, Brazil, Australia and EU countries reveal that average spending peaks at ages 54 to 60 and falls thereafter – especially after the age of 75. However, this trend has been changing in recent years (Figure 25).

From 2005 to 2010, the average gap in spending for households aged under and over 50 fell from around USD2,577 to around USD367 across G20 economies. Spending by the average older consumer is increasing at a faster rate.[t]

This is consistent with trends recently identified in the UK over a longer time period.[183] Moreover, in the few countries where spending by the average older household exceeds younger households – such as in Saudi Arabia – this gap is increasing.

[t]We used national currencies to examine consumption trends over time due to volatile (US) exchange rates in 2015.

Figure 25: Average consumption for households aged 50 and under, minus average expenditure for households aged 50 and over, G20 countries (2005 to 2015)



Projections may underestimate the size of the older consumer base if they are based on demographic projections alone; spending trends by the average older consumer also need to be considered.

Why is this happening?

In addition to the general effect of population ageing, older people's spending is supported by their rapidly rising spending power.

These trends are not unexpected, given the growing population share of older consumers, as well as the rapid rise in older consumers' spending power compared to other demographic groups across countries.[184]

The spending power or disposable income of people in Europe aged 60 and over is expected to rise from 28% of Europe's USD13 trillion total spending power to a third of Europe's USD16 trillion spending power by 2030.[185]

The comparatively strong growth in older households' average spending may be related to relatively rapid increases in this cohort's disposable income – in countries with a shift toward longer working lives, that may be supporting this.[186] Moreover, since poor health is a barrier to spending at older ages, both by affecting and independent

of income,[187] health improvements by country could also be relevant.

Rising average spending and spending power figures for the average older person mask rising inequality in living standards among older people.

However, it is important to note that findings for the 'average' older person hide significant inequality among older people, particularly the experiences of the most disadvantaged.

Income inequality is particularly prevalent in the US, Korea and Mexico, and wealth inequalities are far greater than income inequalities in most countries.[188]

Moreover, across OECD countries, poverty rates are relatively high among older people, especially those aged 75 and over, where they exceed rates for the general population.[189]

This highlights the diversity in experience for different age groups of older people. This is particularly the case for women: annual pension payments for those aged over 65 are on average about 27% lower for women; old-age poverty is much higher among women than men.[190]

Income inequality is growing among older people; with relatively high rates of inequality expected to accumulate over the course of younger people's lives.[191] It is likely that more older people will face unemployment and low salaries in the future, while others enjoy higher, stable earning paths.[192]

Recent reforms to make pension systems more financially sustainable, combined with falling family sizes, mean that pensioner poverty is likely to rise in several OECD countries.[193]

These trends call into question whether increases in older people's average spending and disposable incomes are set to continue.

Policy makers need to ensure no one is left behind, so that everyone is able to fulfil their social and economic potential and help realise a longevity dividend. To widen their reach, businesses will need to tailor goods and services to a range of income levels.

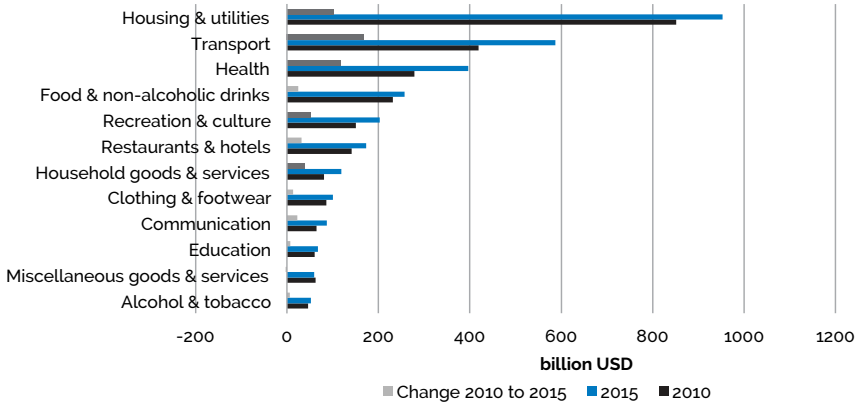
Our analysis: What older people spend their money on

What's happening?

Housing & utilities, transport, health, and food are among the top five sectors serving older consumers across the US, Canada and Australia. Spending on recreation & culture, and household goods & services is also high.

The top sectors for older consumers are similar across countries. In the US, Canada and Australia housing & utilities, transport, health, and food & non-alcoholic drinks were all among the top five sectors for people aged 50 and over in 2015 (Figures 26, 27 and 28)[u]. Recreation & culture joined them in the US and Australia, whereas Canada added household goods & services. Similar findings are also found elsewhere. Previous research by ILC found that in the UK, older consumers also spend significant amounts on recreation & culture, transport, and food & non-alcoholic drinks.[194]

Figure 26: Total spending in the US by people aged 50 and over, by sector, (2010 and 2015)



[u]The data in these graphs is displayed in national currencies, given the significant volatility in (US) exchange rates in 2015.

Figure 27: Total (household) spending in Canada by people aged 50 and over, by sector, (2010 and 2015)

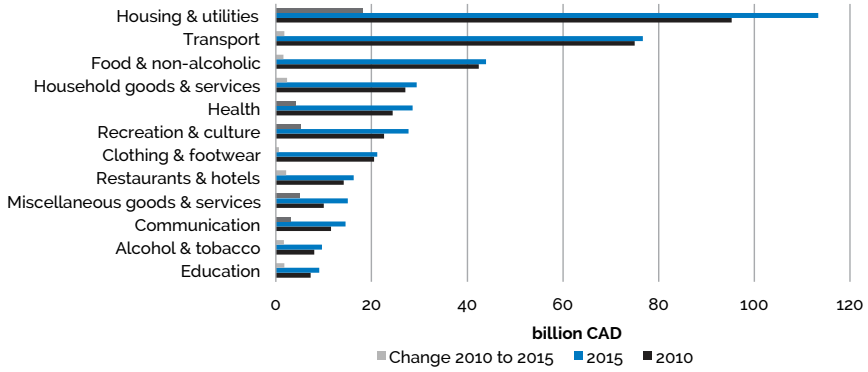
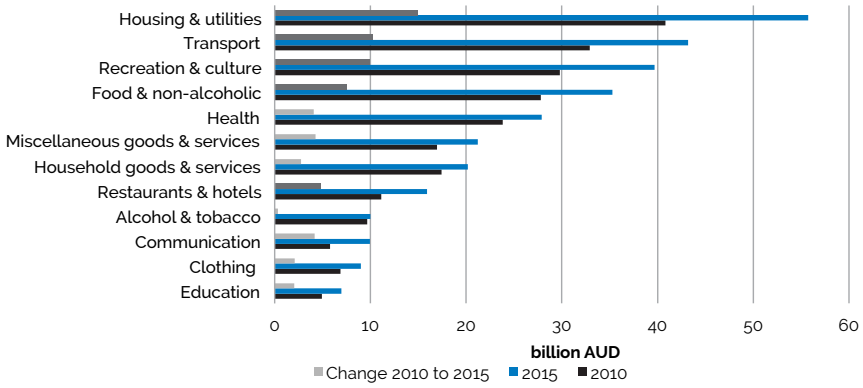


Figure 28: Total (household) spending in Australia by people aged 50 and over, by sector, (2010 and 2015)



The top four fastest-growing sectors serving older consumers in the US, Australia and Canada include housing & utilities and recreation & culture. Spending on transport is growing significantly in the US and Australia, and spending on health in the US and Canada.

Spending by older consumers is increasing fast in a number of sectors, which vary across countries.

Table 4: Growth in spending by older consumers (2010 – 2015)

Country	Category	Increase
US	Transport	168 billion (USD)
US	Health	117 billion (USD)
US	Housing & utilities	102 billion (USD)
US	Recreation & culture	52 billion (USD)
US	Household goods & services	32 billion (USD)
Australia	Housing & utilities	15 billion (AUD)
Australia	Transport	10 billion (AUD)
Australia	Recreation & culture	10 billion (AUD)
Australia	Foot & non-alcoholic beverages	8 billion (AUD)
Australia	Restaurants & hotels	5 billion (AUD)
Canada	Housing & utilities	18 billion (CAD)
Canada	Recreation & culture	5 billion (CAD)
Canada	Misc. goods & services	5 billion (CAD)
Canada	Health	4 billion (CAD)
Canada	Communication	3 billion (CAD)

Strong growth in spending by older consumers is also seen in the UK, in recreation & culture, transport, household goods & services,[195] as well as food & restaurants and hotels. The EU is seeing rises for health, food, household goods & services and recreation & culture.[196]

Maximising the longevity dividend

Why this matters

If spending didn't fall at older ages, total annual household spending by people aged 50 and over across G20 countries (excluding the US) would have increased by over USD111 billion in 2015 - more than the GDPs of Bulgaria and Croatia combined.

We modelled the potential economic gain of preventing the current drops in spending as we get older that are currently seen across most G20 countries. We found that this would have led to an

increase in household spending by people aged 50 and over (excluding the US) totalling over USD111 billion in 2015. See the separately published Appendix at https://ilcuk.org.uk/HealthEqualsWealth for details of modelling methods.

It's important to note that not all of the drop in spending will be caused by avoidable barriers to consumption. Other reasons for drop in expenditure include lower incomes as a result of involuntary retirement and barriers to work,[197] a lack of savings in retirement and a desire to pass on inheritance.[198] Lower levels of spending can also be explained by lower housing costs and fewer household members.[v] However, closing the consumption gap, even partially, still holds the potential to generate significant gains. As populations age, addressing barriers to employment and spending in later life will be even more important.

As our economies become more reliant on older consumers, this cohort cannot be ignored. This consumer market is a significant global opportunity for business.

Older consumers could represent a significant opportunity for businesses and innovators – and a sizeable export market even when considered on a global scale (Figure 22, page 57).

If older households' spending and importance to the economy continues to grow, their tastes and preferences will increasingly dictate emerging market opportunities. Many studies show that their spending will likely continue to grow;[199] the European Commission projects that the their spending will grow to €5.7 trillion, increasing 5% each year from 2015 to 2025.[200]

Consumer brands have on occasion been criticised for ignoring older consumers:[201] the findings for those aged 56 to 64 in the US highlight that profits may be at stake. This age group's importance to the consumer market is rising fast. Businesses should take note.

Longer working lives can help support consumption as populations age.

Countries that have seen employment rates rise for older people have seen a relatively large increase in earnings for this cohort. This has led to a relatively high percentage growth in spending for older

[v]Because the data we have used to estimate total household spending for each country is not equivalised, this does not take into account the number of household members in each household.

households (considered in national currency)[w]. Examples include Bulgaria, Sweden, Estonia and Malta. This compares to Greece, Turkey and Cyprus, where these three measures have either fallen during the same time period, or increased relatively slowly.

This relationship between employment, earnings and consumption, suggests the importance of longer working lives to support private consumption as populations age.

What can be done?

Maximising older people's potential economic contribution through consumption will require action to ensure that the market is responsive to the potential opportunities of ageing.

Businesses who make their goods and services more inclusive, or innovate to better serve this demographic, will likely capture a fast-growing global consumer base. Policy makers may also strengthen their economies and create jobs by supporting businesses in these markets (see *Existing G20 policies*).

We must recognise the growing contribution of older people and the global opportunities this creates to boost economic growth and create jobs, and to enhance older people's quality of life. If we don't adapt, we may see consumption fall as a share of GDP.

Action will be needed across a wide range of sectors.

Health will not be the only sector to benefit from longevity.[202]

The health and care sectors will be boosted by population ageing - this is the fastest growing sector serving older consumers in the EU. Across G20 economies these sectors already support a significant number of jobs, benefit GDP, and provide a valuable service that indirectly benefits and sustains the wider economy. There is potential for further development of this market. Innovators have the potential to both attract older consumers and support public health systems. Health innovations can be exported to a growing global market, creating further jobs and growth. The provision of formal care services frees up informal carers to move into paid employment, and reduces the pressure on those in ill-health.

[w]Due to volatile (US) exchange rates in 2015, we used national currencies to examine consumption trends over time. The US experienced its fastest increase in 40 years in 2015 relative to other currencies, while the EU currency did relatively poorly. See: https://money.cnn.com/2015/03/16/investing/us-dollar-fastest-rise-40-years/index.html

While policy makers often view spending on health and care as a burden, supporting business innovation in this sector may incur economic rewards. Successful innovations can be exported globally to boost economic growth along with health outcomes. Countries that develop globally competitive products and services in areas like: solutions that support a healthy and active lifestyle; wearable technologies; functional foods; personalised nutrition; preventative medicine, including vaccines; and integrated care services, will likely reap the rewards.

But while spending on health is growing fast in the US and Canada, it's not the fastest growing sector overall; spending on housing and utilities, transport, and recreation & culture is growing at a faster rate in all the countries studied. Many sectors will benefit from longevity, and if they respond, this could significantly benefit an ageing population.

Within the transport sector, for example, the demand for driverless cars is expected to rise. These have the potential to significantly improve older people's quality of life by expanding 'driving lifespans', improving safety, and enabling people to maintain social connections for longer.[203]

The strong growth in spending on transport, recreation & culture, and restaurants & hotels indicates that 'silver tourism' will be fruitful. Travellers aged 65 and over are expected to double the number of international journeys to 180 million by 2025 (compared to 2016 figures). This would account for one in eight international trips worldwide. New sectors, such as 'medical tourism,' (where travellers combine medical treatments with holidays) are emerging in response. These have the potential to significantly improve people's later years.[204]

But companies will need to appeal to a broad income base and recognise that those on lower incomes are also a valuable market. Companies like Shearings,[205] which offer assisted affordable coach holidays, have recognised the opportunities of tapping into a broader consumer base.

The growth in spending on housing, and household goods & services, also offers real potential for these sectors to develop age-friendly housing and smart home solutions to enable more meaningful, connected, independent lives for older people, while helping them live at home for longer.[206]

The communication sector is also attracting older consumers. Spending is increasing rapidly in Canada and Australia, where it grew by 72% between 2010 and 2015. This challenges the stereotype that tech is for young people[207] and highlights the broad range of sectors that have the opportunity to respond.

Retailers, marketers and goods and service providers will have to adapt.

Retailers and service providers will need to adapt to effectively respond to demographic change. Too many older consumers still feel that businesses don't understand their needs.[208] The *Nielsen Global Survey about Aging* found that 51% of older people don't see adverts that reflect their age group, 43% have trouble finding packaging that is easy to open, and 46% have difficulty navigating service-oriented industries.[209] Without momentous change, many businesses may miss out.

Existing G20 policies

Countries around the world have started to take notice of the ageing consumer market. Policies to help older people access spending opportunities, and to support businesses targeting the older consumer market, are starting to emerge across the G20. These include:

- Developing a strategy to help businesses tap into these new opportunities:
    - The EU Smart Silver Economy project[210] seeks out strategic information and data, such as mapping out sectors of comparative advantage, to develop a Silver Economy Strategy for Europe.[211]
    - As part of this project, the European Commission has consumer policy initiatives to drive, what it calls the European 'silver economy'. This includes promoting low-season tourism for senior citizens throughout the EU.[212]
- Incentivising and supporting innovators:
    - The UK's Industrial Strategy programme recognises an ageing society as one of its five Grand Challenges, which incentivises and provides financial support to promising innovators in new care technologies, housing models and retirement savings products.[213]

    - The European Commission also launched the European Innovation Partnership in Active and Healthy Ageing to foster innovation and digital transformation in the field of active and healthy ageing[214] along with other initiatives in this space.[215]

- Considering changes to regulations and standards to support the 'silver economy':
    - APEC has recently issued reports considering the role of *Standards and Innovation for Driving APEC's Silver Economy*.[216]

Does health equal wealth?

Our analysis: Health and the longevity dividend

There is a growing body of evidence showing that poor health is a major barrier to spending, working and undertaking productive non-market activities in later life. Society can, to a large extent, overcome this barrier.

We have seen that there is significant variation in the economic contributions and consumption levels of older people, and in how trends change over time. In this section, we explore why. In particular, how much does health affect participation and/or time spent on economic and non-economic activities as we grow older?

To answer this question, we examine how various measures of health, and government investment in health, are related to measures of employment, volunteering, caring in the household, offering informal help to other households[x] and consumption, at both the individual and country level[y] (see Table 5). For this we use a number of regression models controlling for a range of factors, as supported by previous research.[z]

It is important to note that our findings only identify correlations, not causal relationships.[217] Previous studies that have tried to identify a causal relationship have found a negative relationship between poor health (particularly health shocks) and employment,[218] consumption (mainly via employment shocks),[219] volunteering,[220] and other unpaid contributions.[221]

[x]This mainly involves caring for people outside the household and looking after grandchildren. We weren't able to study this measure at the individual level, as the number of people offering informal help in the SHARE survey is relatively low, making it difficult to include all the relevant controls in the model.

[y]We use individual-level data as this reduces the number of factors that may bias findings; we use country-level data to explore whether any relationships identified at the individual level are s ignificant across countries.

[z]We use a multi-level mixed effects regression model on individual-level data and an OLS regression model on country-level data, including a range of relevant control variables, as supported by previous research. See the separately published Appendix for more detail, at https://ilcuk.org.uk/HealthEqualsWealth.

Table 5: Health and outcome variable data measures

	Health measures	Measures of government investment/actions to support health/ people in poor health	Outcome variables
Regressions (mainly) using individual level data	• Cognition (strength of recall) • Self-reported health (categories: excellent; very good; good; fair; and poor) • Difficulties with two or more daily activities or instrumental daily activities • Number of health conditions • Mobility index (1=good to 6=poor).*		• Probability of being employed (ages 50 - 65 and 65 - 75) • Probability of frequency of voluntary work (ages 50 – 65 and 65+) • Probability of informal help outside the household (ages 50+) • Average food expenditure outside the household in the last 12 months (a proxy for consumption) (ages 50+ and 65+) • Probability of caring for a partner (who is unwell) within the household (aged 50+)
Regressions using country level data	• Self-reported health (% of population aged 65+ reporting good health) • % of population aged 65-74 limited in ability to undertake daily activities	• Flu vaccine rates (ages 65+) • Government spending on health/ preventative health/as a % of GDP	• Employment rate (ages 55 to 64 and 65 to 69) • Average annual hours spent volunteering (ages 65+) • Average annual hours spent offering informal help outside the household (ages 65+) • Average annual hours spent caring for an adult household member • Average annual (equivalised) consumption in purchasing power standard (ages 60+)

**We regressed the mobility index on food expenditure outside the household (a proxy for consumption) only. This was an alternative to activities of daily living (including mobility problems). Previous research found a relationship between good mobility and consumption by older people: https://ilcuk.org.uk/the-missing-billions-the-economic-cost-of-failing-to-adapt-our-high-street-to-respond-to-demographic-change/*

N.B. The data used for the results in Table 5 is sourced using Wave 7 (2017) from the Survey of Health Ageing and Retirement, *which contains data on individuals across 27 European countries. See the separately published Appendix for more detail, at https://ilcuk.org.uk/HealthEqualsWealth.*

Individual-level results

What's happening?

Table 6: Regression results using individual-level data

	Probability of working		(Probability of) frequency of volunteering		Average (annual) food exp outside HH	Probability of caring for partner within HH
Age group/health measure	**50 to 65**	**65 to 74**	**50 to 65**	**65+**	**50+**	**50+**
Self-reported health						
Fair vs poor	0.76***	2.15***				
Good vs poor	1.47***	2.35***				
Very good vs poor	1.74***	2.69***				
Excellent vs poor	1.5***	2.81***				
Good vs fair or poor			0.29**			-0.025**
Very good or excellent vs fair or poor			0.40**	0.57**	0.2***	
Activities/ instrumental activities of daily living (2 or more)	-15.3***/-2.7*	/-0.84**				
Strength of cognition	0.17***		0.15***		0.06***	
Mobility problems	-	-	-	-	-0.02*	-

** 10% sig, ** 5% sig, *** 1% sig*

N.B. The data used for the results in Table 6 is sourced using Wave 7 (2017) from the Survey of Health Ageing and Retirement, which contains data on individuals across 27 European countries. See the separately published Appendix for more detail, at https://ilcuk.org.uk/HealthEqualsWealth. Only the results that are statistically significant are noted in this table.

For most of the health measures studied, better health is positively associated with work, volunteering and consumption for older people. But people are less likely to report that their health is good if they are caring for a partner at home.

Table 6 indicates that health may be an important determinant of the economic impact and social contributions for older people. There is a positive and statistically significant correlation between objective (e.g. strength of cognition) and subjective measures of good health (e.g. self-reported health) and these outcome variables. The one exception is caring for a partner in the household, where this is negatively related to self-reported health.

People who report being in good[aa] rather than poor health are over four times more likely to be in work between the ages of 50 and 65, and over 10 times more likely between 65 and 74. Those who are limited in daily activities are significantly less likely to work as they get older.

Across 27 European countries (when controlling for relevant factors):

- Individuals who report good health are more likely to be in work at older ages.
- Individuals who report being in good/very good/excellent health are over four times more likely to be in work at ages 50 to 65 than those who report poor health.
- Individuals who report good/very good/excellent health are over 10 times more likely to be in work at ages 65 to 74 than those who report poor health
- Individuals who have difficulties with two or more activities of daily living (ADLs), such as dressing and walking across the room, or instrumental activities of daily living (IADLs), such as doing housework and shopping for groceries, are significantly less likely to be in work at these ages

The last result is interesting because there are actions we can take to reduce the impact of different conditions on ADLs – including adapting housing, using care technologies[222] and providing inclusive transport – and these may in turn support employment in later life.[223]

[aa]This includes not only "good", but also "very good" and "excellent".

These results are generally consistent with previous cross-country studies, which find that older people with better health (either self-reported or objectively measured), as well as those with fewer ADL/IADL limitations, are more likely to be employed and less likely to retire early.[224]

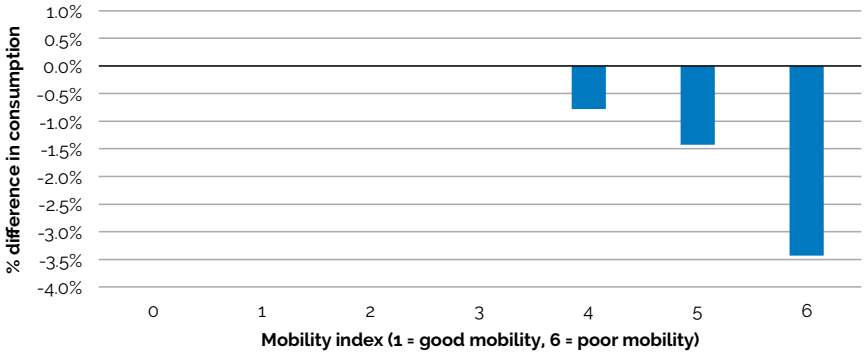
Health and spending are positively correlated: a 1% increase in self-reported health is associated with a 20% increase in average yearly spending on eating out; good mobility and cognition are also positively associated with spending.

Health also affects consumption in later life (Figure 29). People aged 50 and over with better self-reported health, fewer mobility problems, or stronger cognition levels, on average spend more on eating out (when controlling for relevant factors like disposable household income). A 1% increase in self-reported health is associated with a 20% increase in average yearly spending on eating out.

Very poor mobility (index=6) is associated with a 3.5% drop in average yearly spending on eating out compared with very good mobility (index=1). This is consistent with other UK research, which finds a negative association between bad health (in particular, poor mobility) and consumption (once disposable income and other factors are accounted for).[225]

Given that previous research also finds that health shocks can cause significant negative drops in consumption by causing unexpected retirement, our results may underestimate the impact of spending on health, by not considering the effect of health on consumption via income shocks.[226]

Figure 29: Predicted difference in consumption outside the house, by mobility



People with better self-reported health are nearly twice as likely to volunteer, and volunteer frequently, as they get older; those with better cognition are more likely to volunteer between the ages of 50 and 65.

Good health may also enable older people to make unpaid contributions. Across Europe, people with better self-reported health are 1.5 times more likely to volunteer, and volunteer frequently, between the ages of 50 and 65 and 1.8 times more likely between 65 and 74. Individuals with better cognition are 1.2 times more likely to volunteer and to volunteer more frequently.

These findings generally support previous studies, which find that physical and mental health problems (both self-rated and objectively measured) are negatively associated with volunteering[227] (although the impact of cognition on volunteering has been less explored).[ab] While previous research found that people with ADL/IADL limitations are less likely to volunteer in later life, we didn't find a significant relationship.[228] Previous research also found that grandparents in poor health are less likely to grandparent (across Europe and the US).[229]

People who report better health are less likely to care for their partner.

People who report better health are less likely to care for a partner with one or more ADL/IADL limitations in the household. Previous studies found that while caring can have positive effects on health and wellbeing (for instance, by improving self-esteem and confidence), older spouses providing intense levels of care under strain tend to have worse mental and physical health. This is likely due to the stresses of providing this level of care.[230]

[ab]Nevertheless, a number of studies have explored the impact of volunteering on cognition, for example: https://onlinelibrary.wiley.com/doi/full/10.1111/jgs.14398

Country-level results

What's happening?

Table 7: Regression results using country-level data

Health/investment in health measure	Employment rate, ages 55 to 64	Employment rate, ages 65 to 69	Volunteering, ages 65+	Helping outside the HH, ages 65+	Caring in the HH, ages 65+	Consumption, ages 60+
Limited in ability to undertake daily activities (age 65+)	-0.004***	-0.003***		-0.016*		-0.008*
Self-reported health (age 65+)	0.002***		0.007**			0.01***
Health expenditure	0.03***		0.06*			0.095***
Preventative health expenditure			1.051***			0.93**
Flu vaccination rate (age 65+)		0.0008***				0.006***

** 10% sig., ** 5% sig., *** 1% sig*

N.B. The data used for the results in Table 7 are sourced from the OECD and Eurostat, which contain country-level data on OECD and European countries over a number of years, but the countries and years differ for each regression. For details on the data and methods used to generate these results, see the separately published Appendix at https://ilcuk.org.uk/HealthEqualsWealth. Only statistically significant results are noted in this table.

Countries with relatively high levels of self-reported health or fewer people who struggle with activities of daily living have relatively high levels of employment, unpaid contributions and consumption for older people.

Measures of health, and investment in health, may be important factors in determining which countries are closest to realising a longevity dividend (Table 7).

Controlling for relevant factors, countries with higher proportions of people aged 65 and over who report that their health is good have:

- Higher employment rates for people aged 50 to 64.
- Higher average spending rates for people aged 60 and over.
- More hours volunteered by people aged 65 and over (Figure 30).

Across countries, a 1 percentage point increase in the number of people aged 65 and over reporting good health is associated with a 1% increase in average consumption by people aged 60 and over, and an average of 0.7 extra volunteer hours per older person, per year (around 12.5 million hours for the whole of Germany).

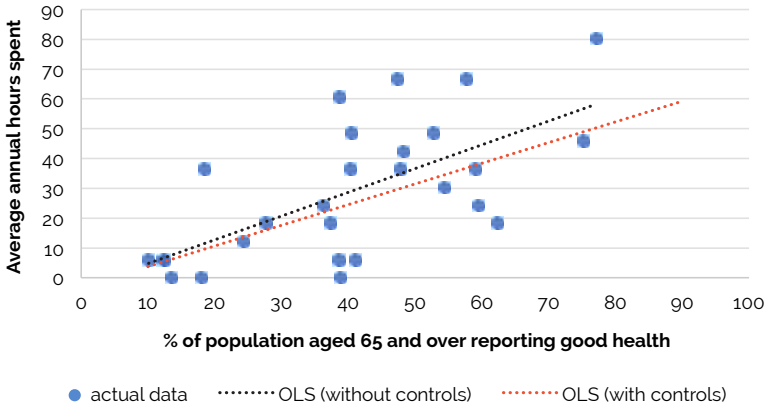
Countries with fewer people aged 65 and over with ADL limitations see people of that age spending more time volunteering and informally helping outside the household, on average.

Countries with lower rates of ADL limitations at ages 65 and over also see higher consumption rates for people aged 60 and over, higher employment rates for people aged 55 and over and more hours spent informally helping outside the household by people aged 65 and over.

A 1 percentage point drop in people aged 65 and over with ADL/IADL limitations is associated with a 0.4 percentage point increase in employment rates for people aged 55 to 65, and a 0.3 percentage point increase for those aged 65 to 69.

Across countries, we found no relationship between health measures and time spent caring for an adult household member. As noted above, the relationship between health and demand for/provision of care is complex.

Figure 30*: Association between self-reported health and volunteering for people aged 65 and over, across countries



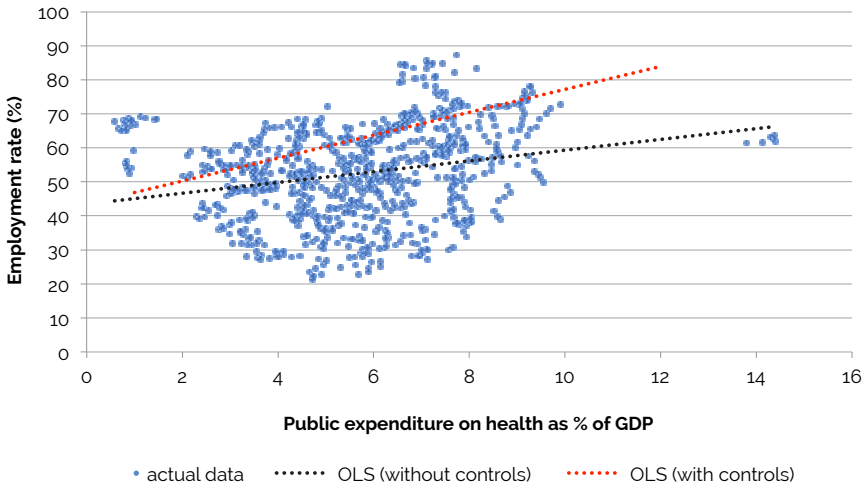
OLS is the type of regression model used to explore the relationship.

Across countries, a 1 percentage point increase in health spending is associated with a 3 percentage point increase in the employment rate for people aged 55 to 64.

There is a clear link between investing in health and better levels of employment and unpaid contributions for older people across countries, when we control for relevant factors. For instance, across countries, a 1% increase in public spending on health is associated with a 3 percentage point increase in the employment rate for people aged 55 to 64 (Figure 31) and a 9.5% increase in annual spending by people aged over 60.

To put this into perspective, a 3% increase in employment would have added USD70 billion to the GDP (0.4%) of the US in 2015, while a 9.5% increase in spending would have represented USD188 billion (1.03% of GDP).

Figure 31*: Association between public health expenditure and employment rates for people aged 55 to 64, across countries



OLS is the type of regression model used to explore the relationship.

Across countries, preventative health spending is linked to increased volunteering and spending.

We examined the impact of investing in preventive health interventions, which are cost-effective and can incur significant savings by reducing substantial health treatment costs down the line.[231] Previous studies have demonstrated that increased spending on prevention can support the wider economy and economic growth.[232]

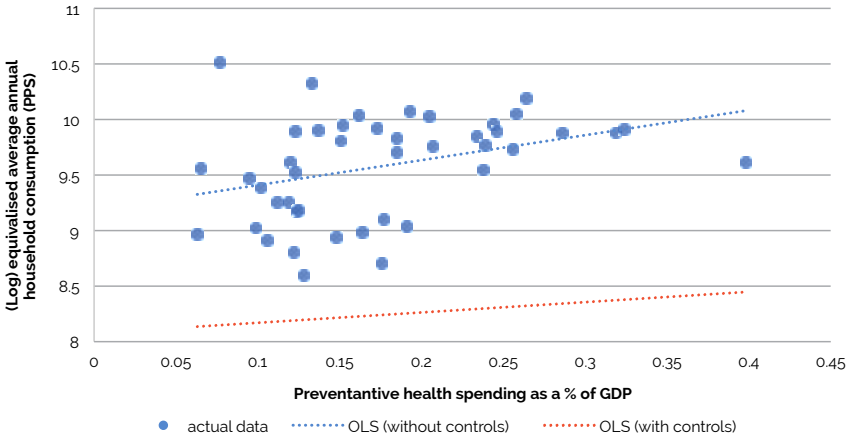
Previous ILC research found that a number of preventable illnesses among those aged 50 to 64 cost better-off countries USD692 billion in sick days, presenteeism and early retirement every year.[233]

However, government spending on preventative health varies greatly across countries, but remains generally low. Canada, the UK and Finland spent 6%, 5.1% and 4%, respectively of their health budgets on preventative health in 2018, but most G20 countries spent under 2.5%, and Slovakia spent only 0.8%.[234]

Preventative health spending as share of GDP is even more strongly associated with consumption than total health spending and volunteering. An increase of just 0.1 percentage points is associated

with a 9% increase in annual spending by people aged 60 and over (worth around 1% of US GDP in 2015). That increase is also associated with 10 more hours of volunteering for each person aged 65 and over (even when controlling for public health spending). The latter would increase the economic value of this age group's volunteering by over 50%, adding over 0.1% to the EU[ac] and Turkey's GDP.

Figure 32*: The association between preventative health spending and consumption at ages 60 and over, across countries



OLS is the type of regression model used to explore the relationship.

Our findings are consistent with previous studies.

Our findings on the relationship between health, employment and volunteering in later life across countries are generally consistent with previous studies. Overall, these suggest that health is an important factor in explaining differences in employment rates[235] and participation in/time spent volunteering across countries.[236]

Fewer studies consider how health explains differences in other unpaid contributions (such as caring and grandparenting) in later life across countries, or whether health explains differences in older people's consumption across countries.

Previous studies have estimated that having healthier people who can work for longer could boost global consumption by around USD1.8 trillion by 2040.[237] Health is also associated with general economic growth across countries via a number of channels,

[ac]This refers to the EU countries in figures 17 and 18 (for which data was available).

including boosting employment and productivity.[238] What has not been explored as much across countries is the impact of health on people's ability to spend their income.

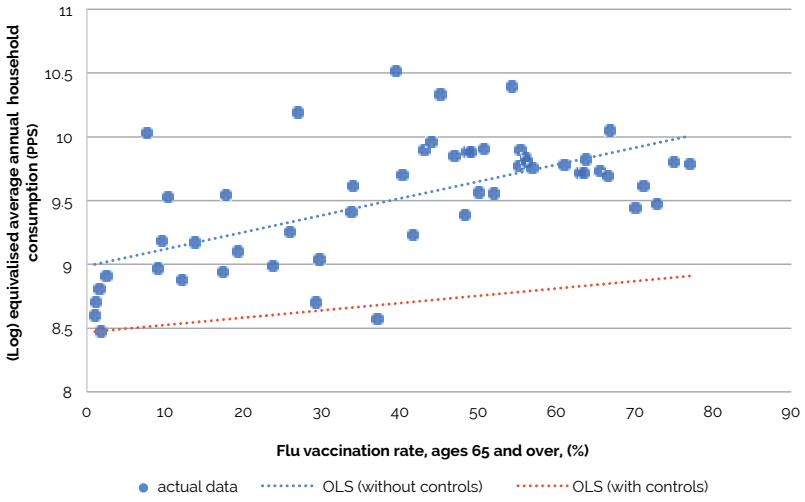
Countries where more older people are vaccinated against the flu have higher employment rates for those aged 65 to 69 and higher consumption rates for those aged 60 and over.

As one specific example of a preventative health intervention, we examined the relationship between flu vaccination rates and economic activities in later life. A number of studies have found that flu vaccines are cost-effective – they not only save on treatment costs, but can also boost worker productivity by reducing sickness absence and presenteeism.[239]

While the WHO has a flu vaccination target of 75% uptake among older people,[240] very few countries meet this; rates vary significantly across countries. In 2018, the percentage of people aged 65 and over who received the flu vaccine ranged from 85.1% in Korea and 72% in the UK, to 10.2% in Estonia and 7.7% in Latvia.[241]

We found that a 1 percentage point increase in the flu vaccination rate across countries is associated with a 0.08 percentage point increase in employment rates for people aged 65 to 69, and a 0.6% increase in average yearly spending by people aged 60 and over (Figure 33). A 0.08 percentage point increase in employment would have added around USD96 billion to earned income in Japan and the US in 2018, and a 0.6% increase in spending would have added USD12 billion to US consumption in 2015.

Figure 33*: The association between flu vaccination rate for people aged 65 and over, and consumption at ages 60 and over, accross countries



OLS is the type of regression models used to explore the relationship.

Why is this happening?

Good health enables contributions.

As noted above there is a strong literature which supports the findings from our analysis, in demonstrating the links between health outcomes and the social and economic contributions of older adults.

Preventative health intervention data was sparse for this study.

One explanation for why we could not find a statistically significant link between preventative health spending and employment, unlike public health spending in general, could be that this data (from the OECD) is missing for several countries.[ad] The stark difference in the number of observations in each regression meant we could not fairly compare the strength of different investments. This is particularly likely given that numerous studies have shown that investments in preventative health incur significant economic benefits – mainly via increasing employment.[242]

[ad]This is also the case for the measure on the share of the population with ADL/IADL limitations.

Flu vaccination has an impact on longer working lives.

Previous studies have identified a relationship between the flu vaccination and work, through fewer days of sickness absence, absenteeism, and impaired on-the-job performance.[243] However, few have looked at the impact on early labour market exit. One explanation for our finding is that people with flu can develop other serious illnesses like pneumonia, bronchitis and heart problems, which often require hospitalisation.[244] These health shocks could cause sufferers to leave the labour market; previous research has found that health shocks that cause hospitalisation can lead to early labour market exit.[245] While the relationship between the flu vaccine and consumption in later life has received even less attention, flu vaccination could plausibly support consumption by reducing the number of health shocks and their effect on employment.

The generosity of pensions and levels of education also appear to be relevant.

Our research also threw up some interesting findings when examining control factors:

- In countries with relatively more generous pension systems, people are less likely to be working after the age of 65. This is consistent with previous studies, which find that financial incentives can be an important motivator for people to work in later life, including across countries.[246]
- People who are more educated are more likely to work at older ages; countries with higher levels of tertiary education tend to have higher employment rates at older ages. This is consistent with previous studies,[247] which suggests that education is a critical factor in extending working lives. For example, one study found that about 25% of the recent increase in labour force participation among those aged 65–69 in Denmark and Sweden is explained by changes in education.[248]
- Researchers have hypothesized that the reason for this is that education not only increases job opportunities by boosting people's skills, but also the quality of jobs open to them, and so can motivate people to work in later life – including beyond retirement age.[249]
- Individuals with higher levels of tertiary education are also more likely to volunteer. This is consistent with previous research, which suggested that education increases the number of social contacts who may suggest volunteering opportunities, as well as enhancing people's motivation to participate. [250]

Investing in health to maximise the longevity dividend

What can be done?

Good health is related to employment, consumption, volunteering and other unpaid contributions.

Our findings, combined with previous research, demonstrate that older people's participation in the market and non-market activities relies on good health. And there is strong evidence that health in later life is modifiable - most diseases are largely preventable.[251,252]

Improving health will have a wide-reaching impact on unlocking the longevity dividend.

Whether policy makers or individuals choose to prioritise work, care or consumption, investing in health will support each choice – although there may be some trade-offs to be made between them.[253]

However, the trade-offs should not be overstated. In countries where older people's unpaid contributions are relatively high, such as the UK, Germany and Sweden, there are comparatively high employment rates for older people compared to countries like Greece and Hungary, where both market and non-market contributions are relatively low. Other research suggests that formal and informal unpaid contributions can be complementary, possibly through increasing social contacts and awareness of opportunities,[254] and that employees who are more active in voluntary work are likely to work beyond retirement.[255]

As well as preventing ill-health, we must also act to support inclusion.

Society can do more to help people in poor health to be active. There is clear evidence that workplaces with appropriate support (such as flexible work practices, where people can speak openly about health needs[256], and retraining opportunities for less physically demanding roles), can enable a significant proportion of people with long-term conditions and disabilities to continue to work.[257] Volunteering organisations can provide flexible, supportive opportunities for people with poor physical and mental health to volunteer.[258] We could make our town centres and transport systems more inclusive to allow everyone to engage in leisure activities, shop and participate in their local communities.[259] As our populations age, the economic benefits of these investments will only grow.

Addressing shortages in formal care provision could lead to a better balance between informal care giving and market contributions in later life.

As demand for care rises,[260] and policy makers face economic pressures to incentivise longer working lives, there is a need for action to support people in balancing work and care.

Good quality work, volunteering and grandparenting can improve health outcomes for older people, but intense caring activities harm health. Addressing shortages in formal care provision could enable a more socially optimal allocation of time between informal care giving and market and other non-market contributions in later life.

We must tackle health inequalities. We can choose now between longer lives that are productive and fulfilled, or more years spent in hardship and poor health in an increasingly divided society.

There are significant inequalities across countries in health outcomes for older people. In 23 OECD countries, the life expectancy gap at age 65 between highly-educated and low-educated populations is 3.5 years for men and 2.4 years for women.[261] The gap is even wider in many emerging G20 economies, like China and India.[262]

Inequalities in healthy/disability-free life expectancy are even wider, at least among EU countries.[263] In the UK, women living in the most deprived areas of England can expect up to 18.9 fewer years in good health compared with those in the least deprived areas of the country.[264] Russia and Mexico show especially wide inequalities in years lived 'disability free.'[265]

Health inequalities (including years lived in good health) have widened recently in some countries, like the US and the UK,[266] while in others they have fallen but still remain high, including some Eastern European countries.[267]

The most disadvantaged people find poor health to be an even bigger factor in preventing them from realising their full economic potential, mainly via employment. Those with less education see a greater drop in later employment due to poor health.[268] Recent OECD work showed that poor health reduces lifetime earnings for men with low levels of education by 33%.[269]

Given their association, health and economic inequalities could increase if we take no action as populations age. Inequalities interact and widen over the life course. As we live for longer, the loss of years worked, the loss of earnings and savings caused by poor health, and the negative impact of economic disadvantage on health can only grow. While poor health can exclude the most disadvantaged from working and volunteering in later life, good, meaningful work and volunteering is known to benefit health and wellbeing. [270]

For these reasons, tackling health inequalities is likely to be the most efficient way to improve health and realise the longevity dividend. While many of those in the highest socio-economic groups are already enjoying this, the most disadvantaged are locked out.

Health interventions shaped by an understanding of health inequalities, and tailored to meet the needs of disadvantaged groups, will have the greatest impact.[271]

We are at a crossroads. Population ageing could result in more people living productive and fulfilled longer lives, or in more people spending more years in hardship and poor health. It all depends on our actions today.

The status quo is not good enough: we urgently need to further invest in preventative health – the economic reward will be worth it.

We already know that preventing poor health is cost effective – not just because it saves on substantial treatment costs further down the line, but also because the wider economic and social benefits are often not considered. And there is considerable scope to do so; with the right investments in preventative health, the average person aged 65 and over in 2040 could be as healthy as a 55-year-old today. Moreover, over 70% of the potential global health benefits that could arise from interventions that already exist today, may be achievable not by treating disease, but through preventing it.[272]

But we are not doing enough. If governments fail to prioritise preventative health in wealthier countries, the number of years lived in poor health is set to increase by 17% over the next 25 years, from 27.1 today to 31.7 years.[273] The number of people with dementia across the G20 is expected to grow from 40 to 100 million by

2040 without effective prevention efforts.[274] A recent WHO report found that the current and projected costs of healthcare are not sustainable for many countries, unless preventative interventions are put in place.[275] On average across the EU, the number of healthy life years for women at age 65 fell between 2005 and 2011.[276] An earlier EU study found that without major health improvements, the target of increasing older people's participation in the labour market will be difficult to meet in all 27 EU countries.[277] Despite this, preventative health spending budgets were significantly cut across the OECD during the economic crisis, and most countries spend less than 3% of their total health budgets on prevention.[278]

A focus on preventative health would not only reduce pressure on health and care services (simply halting further rises to obesity rates would lower per capita expenditures by an average of 0.5% per year across G20 economies[279]), but increase revenues from employment, consumption and the externalities of unpaid contributions.

Good work, volunteering activities, consumption and grandparenting all have positive health effects for older people. Health underpins all the societal shifts we need to take to support an ageing population. The COVID-19 pandemic has shown the link between health and the economy, and the dangers of complacency about preventative health and older people's health. As our populations age, this link will only grow more important.

McKinsey estimates that better health could add USD12 trillion to global GDP in 2040, just by increasing employment and productivity at work. The return on investment would be around 2 to 4 dollars for every dollar invested in better health.[280]

Countries who recognise this and act quickly will gain a competitive advantage.

We need a broader understanding of our success as nations.

Despite the clear links between good health outcomes for all in unlocking wealth, too often conventional economic measures of success lead us to neglect these factors. This may jeopardise our chances for sustainable economic growth as populations age. Moreover, what matters to how nations fare is not just the state of their economies, but also the health of their people, as exemplified during the pandemic, and the extent to which prosperity is shared. The Inclusive Development Index[281] is an alternative measure

that better reflects the key issues which drive success in ageing societies, by accounting for healthy life expectancy as a measure of growth and development, and including a variety of measures of inequality to capture inclusion.

Action by G20 members

Previous ILC research showed that investment in preventative health measures is cost-effective, as it saves on treatment costs and helps older people to become more economically active. G20 members have adopted health policy measures that include adult immunisation programmes, investment in health technologies, and incentives to encourage healthier lifestyles. These include:

- Adult immunisation and vaccination programmes:
    - The UK's NHS has one example of an annual flu vaccination programme, offered to high-risk groups, including older people.[282]
    - The pandemic has focussed attention on the need to improve rates of immunisation among older people, and other at-risk groups. This is now understood as a critical way of releasing pressure on struggling health systems. Both the UK[283] and Italy[284] will now offer free flu vaccinations to people aged 50 and over (previously these were offered to those aged 65 and over).
    - Beyond the G20, Singapore is one of the countries that has partnered with pharmacies to distribute adult immunisation programmes.[285]
- Investing in health technology:
    - Canada has provided CAD21.9 million in funding over three years to the AGE-WELL group;[286] this group creates technologies and services that benefit older adults and caregivers.[287]
- Encouraging individuals to adopt healthier lifestyle policies:
    - The EU's "Farm to Fork" strategy is an example of schemes to provide more information about better dietary choices.[288]

- This mirrors schemes such as the *Bien Vieillir* (Age Well) national plan run by the French government from 2007 to 2009, which promoted healthy ageing among people aged 55 to 75.[289]

- Increasing health check uptake:
  - Australia has encouraged measures to increase longevity and longer lives, as part of its 2018-19 Corporate Plan, through online interactive health checks for people aged 45 and 65.[290]

Conclusions and recommendations

Maximising the global longevity dividend

The longevity economy is growing and transforming G20 economies. Instead of fixating on the costs related to ageing, we should focus on the considerable opportunities to maximise the economic and social impact of longer lives.

Most G20 economies already rely on older households.

The economic impact of people aged 50 and over is growing rapidly in most G20 economies, as they work and earn for longer, spend more and contribute to economic growth. Most G20 economies are also becoming more reliant on their employment, earned income and consumer spending to sustain GDP. Older households already dominate the consumer market – as they become more important they will represent a significant and expanding global export market.

Businesses will need to adapt and innovate to satisfy older consumers' preferences and service the fastest-growing sectors across countries, including housing & utilities, health, transport, recreation & culture, and household goods & services. Governments should help businesses tap into these markets to take the driving seat of this change.

The workforce is ageing – we should recognise this.

We should prepare for a rapidly ageing workforce; people aged 50 and over are working longer than ever before in most G20 economies. Their share of the workforce and earned income is growing. Governments should support and incentivise employers to retain older workers and their extensive experience and talents. Investment in life-long learning will be crucial to help older people have fulfilled longer working lives.

We must also address other barriers to older people's contributions. Ageist work practices hold older workers back; technological shifts threaten to leave them behind. Non-inclusive products, services, town centres and communities hinder their ability to spend, participate and volunteer in their wider communities. While they are already asserting their own changing preferences on work and consumption, individuals cannot drive the change we need.

We must measure and recognise unpaid contributions.

Across countries, we have also seen that older people make significant unpaid contributions, especially after the age of 65. Failing to take the economic value of these into account would significantly underestimate older people's contributions.

We will need to learn to balance the trade-offs between market and non-market contributions. One way to do this is to increase the provision of formal care to ease the pressure on informal carers; intense care-giving leads to poor health and wellbeing.

There is no room for complacency about the longevity dividend. In too many countries poor health limits older people's participation in the market and non-market activities. Countries whose older populations are in better health, or who invest more in their health, not only have higher employment rates and levels of spending for older people, but they spend more time volunteering and caring for others outside the home.

Debates about ageing and health often focus on the cost of healthcare, but as our findings show: *health equals wealth*.

Health helps to explain why some countries are closer to achieving the longevity dividend than others.

The most effective way to benefit from good health is to invest in preventing poor health. This will require a significant shift from the status quo: in nearly all G20 economies preventative health budgets are too low, and are the first to be cut in times of crisis.

There are wide health inequalities, which are increasing in some countries. This urgently needs to change.

We can make sure that the impact of ageing is positive if we take action now.

We must take action at a societal level. We have agency over the future. The decisions policy makers make now, and the incentives they provide to other societal actors, will determine the size of the longevity dividend.

While G20 leaders have started to respond, we must do more. G20 leaders have made nine politically binding, future-oriented commitments on ageing populations. These cover the related subjects of social policy, labour and employment, macroeconomics

and development.[291] However, these constitute only 0.35% of the G20's commitments. We need a more coherent and structured approach.

The effects of the COVID-19 pandemic have strengthened the case for investing in ageing. The potential for health crises to cripple economies is tragically fresh in our minds.

We have also seen that healthier populations, with fewer health conditions, have been more resilient to the pandemic, as with other infectious diseases.[292] Many countries have started to give preventative health interventions the funding they deserve.[293] As societies recover, we can aspire to do more than plaster over the cracks. We can build better, more pro-active health systems and invest in ageing while fuelling immediate economic recovery and increasing our resilience.

Better health means shared wealth for all, through a stronger, more robust economy.

Across the G20 and the EU, some countries have taken proactive policy measures that could help strengthen the global longevity dividend. In particular, policies on employment, health, older consumers, and unpaid contributions have been enacted to reflect an ageing population.

A strategic approach to ageing is required.

The real prize, however, lies in going beyond piecemeal policies to creating a coordinated policy response.

Countries within and outside the G20 have enacted broader policies to enable an ageing population. For example Japan established its Council for Designing the 100-year Life Society in 2017. This group, representing a range of working backgrounds, aims to generate policy ideas to support Japan's economy and society as people increasingly age beyond 100.[294] Members of the OECD have adopted the Council's *Recommendations on Ageing and Employment*, which encourage member states to:

- Strengthen incentives for older workers
- Ensure good job and training opportunities for older workers
- Promote better work choices for workers throughout their careers

Our recommendations

We believe a more coherent and structured approach to ageing is needed across the G20 to maximise the economic opportunity of ageing.

An Ageing Society New Deal

G20 economies should collectively commit to developing country-level Ageing Society New Deals. These should offer a policy framework to deliver meaningful social, economic and political change across G20 economies.

The Ageing Society New Deal should include commitments to:

1. Invest in health and recognise its economic value

I. Increase spending on preventing poor health at all ages:

- **Spend at least 6% of health budgets on prevention** (while Canada has already achieved this, most countries are far from this target). Once this has been accomplished, adopt more ambitious targets, such as the 15% target called for by the UK All Party Parliamentary Group (APPG) on longevity.[295]
- Ensure that **spending on preventative health keeps pace with the growth in preventable ill-health** projected as society ages**, as a minimum.**[296]

II. Tackle health inequalities:

- **Tailor health interventions to meet the needs of disadvantaged groups** and **prioritise health spending on disadvantaged populations of all ages.**

III. Factor in health and inclusion when measuring economic growth:

- Move towards **complementing GDP with a measure that factors in health and inclusion** (such as the Inclusive Development Index).[ae]

[ae]A measure of growth that includes measures healthy life expectancy and inequality.

2. Support work in an ageing and changing world

IV. Incentivise employers and technology providers to redesign working life:

- **Incentivise technology innovation that supports productivity, rather than displacing workers – including older workers who are most at risk.**
- **Incentivise employers to reduce barriers to employment for older people**.

V. Support and empower all generations to have fulfilling and longer working lives:

- **Remove regulatory barriers** (such as mandatory retirement ages), **and incentivise and support people to work for longer** in flexible roles.

VI. Invest in lifelong learning:

- **Invest in opportunities for lifelong learning, and incentivise adoption** by encouraging people to move towards a 'multi-stage life.'

3. Unlock opportunities to tap into older people's growing power as consumers'

VII. Support the health and care economy, in recognition of its economic value:

- **Invest in and develop health and care services,** and support innovation across these sectors.
- **Ensure formal care provision** develops to meet increasing need.

VIII. Support businesses servicing older people:

- **Develop strategies to unlock the longevity dividend**, including support for innovators across sectors and existing businesses that wish to adapt.
- **Develop strategies to support businesses to capture an ageing consumer market**, including support for innovators across sectors and existing businesses that wish to adapt.

IX. Reduce barriers to spending in local communities:

- **Allocate funding to local governments to support inclusion within communities,** for example through action to make transport, and public spaces accessible and inclusive.

4. Recognise and support unpaid contributions

X. Recognise and measure unpaid contributions:

- **Regularly measure unpaid contributions, and calculate their social and economic benefits**.
- **Take into account the impact of health on unpaid contributions** when making decisions about investing in health (such as cost-benefit analysis models).

XI. Support informal carers and involved grandparents:

- **Develop strategies to support older carers and grandparents.**

XII. Enable and incentivise volunteering at all ages:

- **Develop strategies to support and incentivise volunteering, including removing barriers to participation**, particularly for disadvantaged groups.

While we urgently need an Ageing Society New Deal, it won't work if there are older people living in poverty. Ensuring that retirees have adequate incomes for today and tomorrow is essential to realise the longevity dividend. This will require action by both state and private actors. We know that poverty harms health[297] and undermines people's contributions to the market and non-market contributions. We also know that at present the poorest save a disproportionate share of their income.[298] We must ensure that people feel financially secure in later life to realise the benefits of longevity.

The COVID-19 pandemic has created an exceptional opportunity for society to prioritise health and act to support older people. Amidst the devastation it has caused, it has shown us how our economies are linked to health, and exposed the dangers of under-investing in prevention. Let's use this shift in mind-set to commit the funds today that we'll need to realise a longevity dividend tomorrow.

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About the ILC

The International Longevity Centre UK (ILC) is the UK's specialist think tank on the impact of longevity on society. The ILC was established in 1997, as one of the founder members of the International Longevity Centre Global Alliance, an international network on longevity.

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